SFHMarana Reference Manual

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7.29 TMarJetCal.C File Reference 203
7.30 TMarJetCal.h File Reference 204
7.31 TMarLumi.C File Reference 206
7.32 TMarLumi.h File Reference 207
7.33 TMarSyst.C File Reference 209
7.34 TMarSyst.h File Reference 210
7.35 TMCXSectionReweight.C File Reference 212
7.36 TMCXSectionReweight.h File Reference 213
7.37 TMyEvent.C File Reference 215
7.38 TMyEvent.h File Reference 216
7.39 TRun.C File Reference 217
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Chapter 1

SFHMarana Namespace Index

1.1 SFHMarana Namespace List

Here is a list of all namespaces with brief descriptions:

std 9

Chapter 2

SFHMarana Hierarchical Index

2.1 SFHMarana Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

- BaseCut 11
  - TimimgCut 67
- BinningFun 12
  - MarSysBinningFun 34
- FloatFun 13
  - NSelJetsFun 38
  - PtSelJet1Fun 40
  - ThSelJet1Fun 65
- TBinnedcoef_t 53
- TBinnedval_t 54
- THistoManager 59
  - THisto 55
    - MaranaEventLoop 27
- TMarCutMC 76
- TMarCutMCList 79
- TMarJetCal 121
- TMarSyst 128
- TMCXSectionReweight 132
- TObject 136
  - H1ElecCalibration 14
  - H1LarCalParameters 19
  - THisto 55
  - TMarBody 69
  - TMarH1ElecCalibration 108
  - TMarH1LarCalParameters 113
  - TMarLumi 124
- tr99_1_NEW 137
- TRun 139
  - TRunHisto 143
- TTools 145
  - TMarEvent 80

SFHMarEvent 42
TMyEvent 133
TTriggerReweight 158

Chapter 3

SFHMarana Compound Index

3.1 SFHMarana Compound List

Here are the classes, structs, unions and interfaces with brief descriptions:

BaseCut 11
BinningFun 12
FloatFun 13
H1ElecCalibration 14
H1LarCalParameters 19
MaranaEventLoop 27
MarSysBinningFun 34
NSelJetsFun (**FloatFun** returning number of selected jets from **TMarEvent**) 38
PtSelJet1Fun (**FloatFun** returning highest pt selected jets from **TMarEvent**) . . . 40
SFHMarEvent 42
TBinnedcoef_t 53
TBinnedval_t 54
THisto 55
THistoManager 59
ThSelJet1Fun (**FloatFun** returning theta of highest pt selected jet from **TMarEvent**) 65
TimimgCut (**FloatFun** returning theta of highest pt selected jet from **TMarEvent**) 67
TMarBody 69
TMarCutMC 76
TMarCutMCList 79
TMarEvent 80
TMarH1ElecCalibration 108
TMarH1LarCalParameters 113
TMarJetCal 121
TMarLumi 124
TMarSyst 128
TMCXSectionReweight 132
TMyEvent 133
TObject 136
tr99_1_NEW 137
TRun 139
TRunHisto 143
TTools 145
TTriggerReweight 158

Chapter 4

SFHMarana File Index

4.1 SFHMarana File List

Here is a list of all files with brief descriptions:

Funs.h (Declares all Cuts, Event Funs and Iterators for J/psi analysis) 163
H1ElecCalibration.C 165
H1ElecCalibration.h 166
H1LarCalParameters.C 167
H1LarCalParameters.h 168
JpsiMods.C 169
MaranaEventLoop.C 170
MaranaEventLoop.h 173
MarSysBinningFun.C 174
MarSysBinningFun.h (Declares class **MarSysBinningFun**) 175
NCSelection.C 176
SFHMarEvent.C 178
SFHMarEvent.h 180
TestSFHMarana.C 181
THisto.C 183
THisto.h 184
THistoManager.C 185
THistoManager.h 186
TMarBody.C 188
TMarBody.h 189
TMarCutMC.C 192
TMarCutMC.h 193
TMarEvent.C 194
TMarEvent.h 195
TMarH1ElecCalibration.C 199
TMarH1ElecCalibration.h 200
TMarH1LarCalParameters.C 201
TMarH1LarCalParameters.h 202
TMarJetCal.C 203
TMarJetCal.h 204
TMarLumi.C 206
TMarLumi.h 207
TMarSyst.C 209

TMarSyst.h 210
TMCXSectionReweight.C 212
TMCXSectionReweight.h 213
TMyEvent.C 215
TMyEvent.h 216
TRun.C 217
TRun.h 218
TRunHisto.C 220
TRunHisto.h 221
TTools.C 222
TTools.h 223
TTriggerReweight.C 227
TTriggerReweight.h 228
UserTreeParts.h (Declares objects for Marana user tree access) 229

Chapter 5

SFHMarana Namespace Documentation

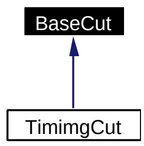
5.1 std Namespace Reference

Chapter 6

SFHMarana Class Documentation

6.1 BaseCut Class Reference

Inheritance diagram for BaseCut:

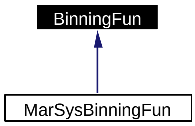


The documentation for this class was generated from the following file:

- **Funs.h**

6.2 BinningFun Class Reference

Inheritance diagram for BinningFun:

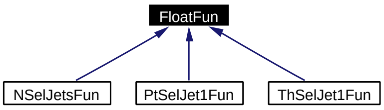


The documentation for this class was generated from the following file:

- **MarSysBinningFun.h**

6.3 FloatFun Class Reference

Inheritance diagram for FloatFun:



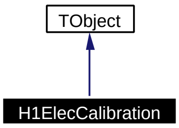
The documentation for this class was generated from the following file:

- **Funs.h**

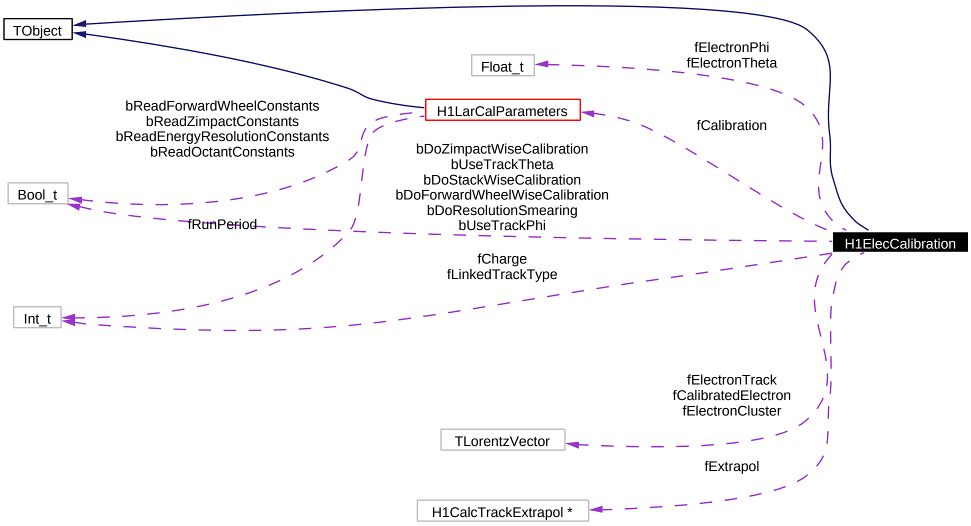
6.4 H1ElecCalibration Class Reference

`#include <H1ElecCalibration.h>`

Inheritance diagram for H1ElecCalibration:



Collaboration diagram for H1ElecCalibration:



Public Member Functions

- **H1ElecCalibration** (Bool_t DoStackWiseCalibration, Bool_t DoZimpactWiseCalibration, Bool_t DoResolutionSmearing, Bool_t UseTrackTheta=false, Bool_t UseTrackPhi=true)
- ∼**H1ElecCalibration** ()
- void **DoStackWiseCalibration** (Bool_t flag=true)
- void **DoZimpactWiseCalibration** (Bool_t flag=true)
- void **DoResolutionSmearing** (Bool_t flag=true)
- const TLorentzVector & **GetElecCalibration** (const TLorentzVector &UncalibratedElectron, const TLorentzVector &ElectronTrack, Int_t Charge, Float_t ZVertex, Bool_t IsMC, Int_t RunPeriod, Int_t LinkedTrackType)

Private Member Functions

- void **MakeVertexElectron** ()
- const TLorentzVector & **GetElectronVector** ()
- Bool_t **IsGoodTrack** ()

Private Attributes

- Bool_t **bUseTrackTheta**
- Bool_t **bUseTrackPhi**
- Bool_t **bDoStackWiseCalibration**
- Bool_t **bDoZimpactWiseCalibration**
- Bool_t **bDoForwardWheelWiseCalibration**
- Bool_t **bDoResolutionSmearing**
- **H1LarCalParameters** * **fCalibration**
- H1CalcTrackExtrapol * **fExtrapol**
- TLorentzVector **fElectronTrack**
- TLorentzVector **fElectronCluster**
- TLorentzVector **fCalibratedElectron**
- Int_t **fCharge**
- Int_t **fLinkedTrackType**
- Float_t **fElectronTheta**
- Float_t **fElectronPhi**

6.4.1 Constructor & Destructor Documentation

6.4.1.1 H1ElecCalibration::H1ElecCalibration (Bool_t *DoStackWiseCalibration*, Bool_t *DoZimpactWiseCalibration*, Bool_t *DoResolutionSmearing*, Bool_t *UseTrackTheta* = false, Bool_t *UseTrackPhi* = true)

6.4.1.2 H1ElecCalibration::~H1ElecCalibration ()

Definition at line 77 of file H1ElecCalibration.C.

References fExtrapol.

6.4.2 Member Function Documentation

6.4.2.1 void H1ElecCalibration::MakeVertexElectron () `[private]`

Definition at line 276 of file H1ElecCalibration.C.

References bUseTrackPhi, bUseTrackTheta, fCharge, fElectronCluster, fElectronPhi, fElectronTheta, fElectronTrack, fExtrapol, and IsGoodTrack().

Referenced by GetElectronVector().

6.4.2.2 const TLorentzVector & H1ElecCalibration::GetElectronVector () `[private]`

Definition at line 311 of file H1ElecCalibration.C.

References fElectronCluster, fElectronPhi, fElectronTheta, and MakeVertexElectron().

Referenced by GetElecCalibration().

6.4.2.3 Bool_t H1ElecCalibration::IsGoodTrack () [private]

Definition at line 337 of file H1ElecCalibration.C.

References fElectronCluster.

Referenced by MakeVertexElectron().

6.4.2.4 void H1ElecCalibration::DoStackWiseCalibration (Bool_t *flag* = true) [inline]

Definition at line 53 of file H1ElecCalibration.h.

References bDoStackWiseCalibration.

6.4.2.5 void H1ElecCalibration::DoZimpactWiseCalibration (Bool_t *flag* = true) [inline]

Definition at line 54 of file H1ElecCalibration.h.

References bDoZimpactWiseCalibration.

6.4.2.6 void H1ElecCalibration::DoResolutionSmearing (Bool_t *flag* = true) [inline]

Definition at line 55 of file H1ElecCalibration.h.

References bDoResolutionSmearing.

6.4.2.7 const TLorentzVector & H1ElecCalibration::GetElecCalibration (const TLorentzVector & *UncalibratedElectron*, const TLorentzVector & *ElectronTrack*, Int_t *Charge*, Float_t *ZVertex*, Bool_t *IsMC*, Int_t *RunPeriod*, Int_t *LinkedTrackType*)

Definition at line 84 of file H1ElecCalibration.C.

References bDoForwardWheelWiseCalibration, bDoResolutionSmearing, bDoStackWiseCalibration, bDoZimpactWiseCalibration, fCalibratedElectron, fCalibration, fCharge, fElectronCluster, fElectronTrack, fExtrapol, fLinkedTrackType, GetElectronVector(), H1LarCalParameters::GetForwardWheelCalibrationFactor(), H1LarCalParameters::GetOctantCalibrationFactor(), H1LarCalParameters::GetResolutionSmearingFactor(), and H1LarCalParameters::GetZimpactCalibrationFactor().

Referenced by TMarEvent::DefineInputParticles().

6.4.3 Member Data Documentation

6.4.3.1 Bool_t H1ElecCalibration::bUseTrackTheta [private]

Definition at line 22 of file H1ElecCalibration.h.

Referenced by ClassImp(), and MakeVertexElectron().

6.4.3.2 Bool_t H1ElecCalibration::bUseTrackPhi [private]

Definition at line 23 of file H1ElecCalibration.h.

Referenced by ClassImp(), and MakeVertexElectron().

6.4.3.3 Bool_t H1ElecCalibration::bDoStackWiseCalibration [private]

Definition at line 25 of file H1ElecCalibration.h.

Referenced by ClassImp(), DoStackWiseCalibration(), and GetElecCalibration().

6.4.3.4 Bool_t H1ElecCalibration::bDoZimpactWiseCalibration [private]

Definition at line 26 of file H1ElecCalibration.h.

Referenced by ClassImp(), DoZimpactWiseCalibration(), and GetElecCalibration().

6.4.3.5 Bool_t H1ElecCalibration::bDoForwardWheelWiseCalibration [private]

Definition at line 27 of file H1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.4.3.6 Bool_t H1ElecCalibration::bDoResolutionSmearing [private]

Definition at line 28 of file H1ElecCalibration.h.

Referenced by ClassImp(), DoResolutionSmearing(), and GetElecCalibration().

6.4.3.7 H1LarCalParameters* H1ElecCalibration::fCalibration [private]

Definition at line 30 of file H1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.4.3.8 H1CalcTrackExtrapol* H1ElecCalibration::fExtrapol [private]

Definition at line 32 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), MakeVertexElectron(), and ~H1ElecCalibration().

6.4.3.9 TLorentzVector H1ElecCalibration::fElectronTrack [private]

Definition at line 34 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), and MakeVertexElectron().

6.4.3.10 TLorentzVector H1ElecCalibration::fElectronCluster [private]

Definition at line 35 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), GetElectronVector(), IsGoodTrack(), and MakeVertexElectron().

6.4.3.11 TLorentzVector H1ElecCalibration::fCalibratedElectron [private]

Definition at line 36 of file H1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.4.3.12 Int_t H1ElecCalibration::fCharge [private]

Definition at line 38 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), and MakeVertexElectron().

6.4.3.13 Int_t H1ElecCalibration::fLinkedTrackType [private]

Definition at line 39 of file H1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.4.3.14 Float_t H1ElecCalibration::fElectronTheta [private]

Definition at line 41 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElectronVector(), and MakeVertexElectron().

6.4.3.15 Float_t H1ElecCalibration::fElectronPhi [private]

Definition at line 42 of file H1ElecCalibration.h.

Referenced by ClassImp(), GetElectronVector(), and MakeVertexElectron().

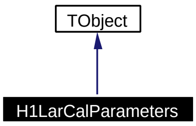
The documentation for this class was generated from the following files:

- **H1ElecCalibration.h**
- **H1ElecCalibration.C**

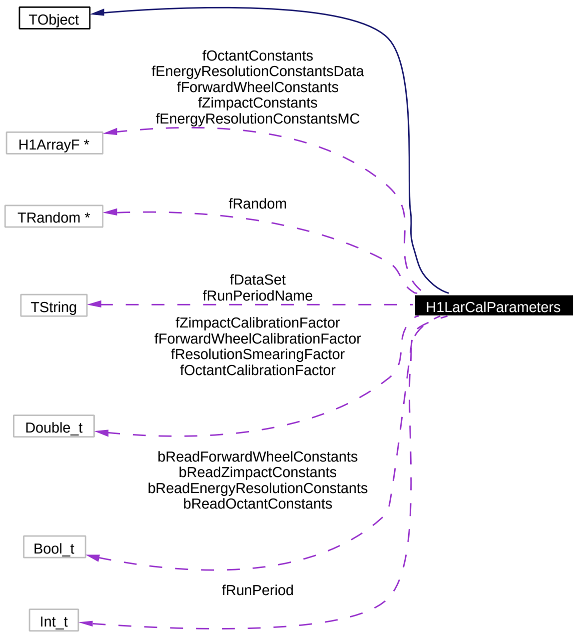
6.5 H1LarCalParameters Class Reference

`#include <H1LarCalParameters.h>`

Inheritance diagram for H1LarCalParameters:



Collaboration diagram for H1LarCalParameters:



Public Member Functions

- **H1LarCalParameters** (TString DataSet, Int_t RunPeriod=5)
- ∼**H1LarCalParameters** ()
- void **SetCalibrationParametersFile** (TString filename)
- void **Reset** ()
- Double_t **GetOctantCalibrationFactor** (Float_t &phi, Float_t &zimpact)
- Double_t **GetZimpactCalibrationFactor** (Float_t &zimpact)
- Double_t **GetForwardWheelCalibrationFactor** (Float_t &zimpact)
- Double_t **GetResolutionSmearingFactor** (Float_t &zImpact)

Private Member Functions

- Int_t **SetLarOctant** (Float_t &phi)

- Int_t **SetLarWheel** (Float_t &zimpact)
- Int_t **SetLarZBin** (Float_t &zimpact, Int_t binsize)
- Int_t **SetForwardWheelZBin** (Float_t &zimpact)
- void **SetOctantConstants** ()
- void **SetZimpactConstants** ()
- void **SetForwardWheelConstants** ()
- void **SetEnergyResolutionConstants** ()
- void **SetOctantCalibrationFactors** (Float_t &phi, Float_t &zimpact)
- void **SetZimpactCalibrationFactors** (Float_t &zimpact)
- void **SetForwardWheelCalibrationFactors** (Float_t &zimpact)
- void **SetResolutionSmearingFactors** (Float_t &zimpact)

Private Attributes

- TString **fDataSet**
- Int_t **fRunPeriod**
- TString **fRunPeriodName**
- H1ArrayF * **fOctantConstants**
- H1ArrayF * **fZimpactConstants**
- H1ArrayF * **fForwardWheelConstants**
- H1ArrayF * **fEnergyResolutionConstantsData**
- H1ArrayF * **fEnergyResolutionConstantsMC**
- Double_t **fOctantCalibrationFactor**
- Double_t **fZimpactCalibrationFactor**
- Double_t **fForwardWheelCalibrationFactor**
- Double_t **fResolutionSmearingFactor**
- Bool_t **bReadOctantConstants**
- Bool_t **bReadZimpactConstants**
- Bool_t **bReadForwardWheelConstants**
- Bool_t **bReadEnergyResolutionConstants**
- TRandom * **fRandom**

6.5.1 Constructor & Destructor Documentation

6.5.1.1 H1LarCalParameters::H1LarCalParameters (TString *DataSet*, Int_t *RunPeriod* = 5)

6.5.1.2 H1LarCalParameters::~H1LarCalParameters ()

Definition at line 62 of file H1LarCalParameters.C.

References fEnergyResolutionConstantsData, fEnergyResolutionConstantsMC, fForwardWheel-Constants, fOctantConstants, fRandom, and fZimpactConstants.

6.5.2 Member Function Documentation

6.5.2.1 void H1LarCalParameters::SetCalibrationParametersFile (TString *filename*)

Definition at line 99 of file H1LarCalParameters.C.

References fRunPeriod, and fRunPeriodName.

Referenced by SetEnergyResolutionConstants(), SetForwardWheelConstants(), SetOctant-Constants(), and SetZimpactConstants().

6.5.2.2 void H1LarCalParameters::Reset ()

Definition at line 88 of file H1LarCalParameters.C.

References bReadEnergyResolutionConstants, bReadForwardWheelConstants, bReadOctant-Constants, and bReadZimpactConstants.

Referenced by ClassImp().

6.5.2.3 Double_t H1LarCalParameters::GetOctantCalibrationFactor (Float_t & *phi*, Float_t & *zimpact*)

Definition at line 122 of file H1LarCalParameters.C.

References fOctantCalibrationFactor, SetOctantCalibrationFactors(), and SetOctantConstants().

Referenced by H1ElecCalibration::GetElecCalibration().

6.5.2.4 Double_t H1LarCalParameters::GetZimpactCalibrationFactor (Float_t & *zimpact*)

Definition at line 131 of file H1LarCalParameters.C.

References fZimpactCalibrationFactor, SetZimpactCalibrationFactors(), and SetZimpact-Constants().

Referenced by H1ElecCalibration::GetElecCalibration().

6.5.2.5 Double_t H1LarCalParameters::GetForwardWheelCalibrationFactor (Float_t & *zimpact*)

Definition at line 139 of file H1LarCalParameters.C.

References fForwardWheelCalibrationFactor, SetForwardWheelCalibrationFactors(), and Set-ForwardWheelConstants().

Referenced by H1ElecCalibration::GetElecCalibration().

6.5.2.6 Double_t H1LarCalParameters::GetResolutionSmearingFactor (Float_t & *zImpact*)

Definition at line 147 of file H1LarCalParameters.C.

References fResolutionSmearingFactor, SetEnergyResolutionConstants(), and SetResolutionSmearingFactors().

Referenced by H1ElecCalibration::GetElecCalibration().

6.5.2.7 Int_t H1LarCalParameters::SetLarOctant (Float_t & *phi*) [private]

Definition at line 329 of file H1LarCalParameters.C.

Referenced by SetOctantCalibrationFactors().

6.5.2.8 Int_t H1LarCalParameters::SetLarWheel (Float_t & *zimpact*) [private]

Definition at line 342 of file H1LarCalParameters.C.

Referenced by SetOctantCalibrationFactors().

6.5.2.9 Int_t H1LarCalParameters::SetLarZBin (Float_t & *zimpact*, Int_t *binsize*) [private]

Definition at line 368 of file H1LarCalParameters.C.

Referenced by SetResolutionSmearingFactors(), and SetZimpactCalibrationFactors().

6.5.2.10 Int_t H1LarCalParameters::SetForwardWheelZBin (Float_t & *zimpact*) [private]

Definition at line 377 of file H1LarCalParameters.C.

Referenced by SetForwardWheelCalibrationFactors().

6.5.2.11 void H1LarCalParameters::SetOctantConstants () [private]

Definition at line 155 of file H1LarCalParameters.C.

References bReadOctantConstants, fDataSet, fOctantConstants, and SetCalibrationParametersFile().

Referenced by GetOctantCalibrationFactor().

6.5.2.12 void H1LarCalParameters::SetZimpactConstants () [private]

Definition at line 180 of file H1LarCalParameters.C.

References bReadZimpactConstants, fDataSet, fZimpactConstants, and SetCalibrationParametersFile().

Referenced by GetZimpactCalibrationFactor().

6.5.2.13 void H1LarCalParameters::SetForwardWheelConstants () [private]

Definition at line 205 of file H1LarCalParameters.C.

References bReadForwardWheelConstants, fDataSet, fForwardWheelConstants, and SetCalibrationParametersFile().

Referenced by GetForwardWheelCalibrationFactor().

6.5.2.14 void H1LarCalParameters::SetEnergyResolutionConstants () [private]

Definition at line 231 of file H1LarCalParameters.C.

References bReadEnergyResolutionConstants, fDataSet, fEnergyResolutionConstantsData, f-EnergyResolutionConstantsMC, fRunPeriodName, and SetCalibrationParametersFile().

Referenced by GetResolutionSmearingFactor().

6.5.2.15 void H1LarCalParameters::SetOctantCalibrationFactors (Float_t & *phi*, Float_t & *zimpact*) [private]

Definition at line 254 of file H1LarCalParameters.C.

References fOctantCalibrationFactor, fOctantConstants, SetLarOctant(), and SetLarWheel().

Referenced by GetOctantCalibrationFactor().

6.5.2.16 void H1LarCalParameters::SetZimpactCalibrationFactors (Float_t & *zimpact*) [private]

Definition at line 275 of file H1LarCalParameters.C.

References fZimpactCalibrationFactor, fZimpactConstants, and SetLarZBin().

Referenced by GetZimpactCalibrationFactor().

6.5.2.17 void H1LarCalParameters::SetForwardWheelCalibrationFactors (Float_t & *zimpact*) [private]

Definition at line 288 of file H1LarCalParameters.C.

References fForwardWheelCalibrationFactor, fForwardWheelConstants, and SetForwardWheel-ZBin().

Referenced by GetForwardWheelCalibrationFactor().

6.5.2.18 void H1LarCalParameters::SetResolutionSmearingFactors (Float_t & *zimpact*) [private]

Definition at line 300 of file H1LarCalParameters.C.

References fEnergyResolutionConstantsData, fEnergyResolutionConstantsMC, fRandom, f-ResolutionSmearingFactor, and SetLarZBin().

Referenced by GetResolutionSmearingFactor().

6.5.3 Member Data Documentation

6.5.3.1 TString H1LarCalParameters::fDataSet [private]

Definition at line 14 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetForwardWheelConstants(), SetOctantConstants(), and SetZimpactConstants().

6.5.3.2 Int_t H1LarCalParameters::fRunPeriod [private]

Definition at line 15 of file H1LarCalParameters.h.

Referenced by ClassImp(), and SetCalibrationParametersFile().

6.5.3.3 TString H1LarCalParameters::fRunPeriodName [private]

Definition at line 16 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetCalibrationParametersFile(), and SetEnergyResolutionConstants().

6.5.3.4 H1ArrayF* H1LarCalParameters::fOctantConstants [private]

Definition at line 18 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetOctantCalibrationFactors(), SetOctantConstants(), and ~H1LarCalParameters().

6.5.3.5 H1ArrayF* H1LarCalParameters::fZimpactConstants [private]

Definition at line 19 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetZimpactCalibrationFactors(), SetZimpactConstants(), and ~H1LarCalParameters().

6.5.3.6 H1ArrayF* H1LarCalParameters::fForwardWheelConstants [private]

Definition at line 20 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetForwardWheelCalibrationFactors(), SetForwardWheelConstants(), and ~H1LarCalParameters().

6.5.3.7 H1ArrayF* H1LarCalParameters::fEnergyResolutionConstantsData [private]

Definition at line 21 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetResolutionSmearingFactors(), and ~H1LarCalParameters().

6.5.3.8 H1ArrayF* H1LarCalParameters::fEnergyResolutionConstantsMC [private]

Definition at line 22 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetResolutionSmearingFactors(), and ~H1LarCalParameters().

6.5.3.9 Double_t H1LarCalParameters::fOctantCalibrationFactor [private]

Definition at line 24 of file H1LarCalParameters.h.

Referenced by ClassImp(), GetOctantCalibrationFactor(), and SetOctantCalibrationFactors().

6.5.3.10 Double_t H1LarCalParameters::fZimpactCalibrationFactor [private]

Definition at line 25 of file H1LarCalParameters.h.

Referenced by ClassImp(), GetZimpactCalibrationFactor(), and SetZimpactCalibrationFactors().

6.5.3.11 Double_t H1LarCalParameters::fForwardWheelCalibrationFactor [private]

Definition at line 26 of file H1LarCalParameters.h.

Referenced by ClassImp(), GetForwardWheelCalibrationFactor(), and SetForwardWheelCalibrationFactors().

6.5.3.12 Double_t H1LarCalParameters::fResolutionSmearingFactor [private]

Definition at line 27 of file H1LarCalParameters.h.

Referenced by ClassImp(), GetResolutionSmearingFactor(), and SetResolutionSmearingFactors().

6.5.3.13 Bool_t H1LarCalParameters::bReadOctantConstants [private]

Definition at line 29 of file H1LarCalParameters.h.

Referenced by Reset(), and SetOctantConstants().

6.5.3.14 Bool_t H1LarCalParameters::bReadZimpactConstants [private]

Definition at line 30 of file H1LarCalParameters.h.

Referenced by Reset(), and SetZimpactConstants().

6.5.3.15 Bool_t H1LarCalParameters::bReadForwardWheelConstants [private]

Definition at line 31 of file H1LarCalParameters.h.

Referenced by Reset(), and SetForwardWheelConstants().

6.5.3.16 Bool_t H1LarCalParameters::bReadEnergyResolutionConstants [private]

Definition at line 32 of file H1LarCalParameters.h.

Referenced by Reset(), and SetEnergyResolutionConstants().

6.5.3.17 TRandom* H1LarCalParameters::fRandom [private]

Definition at line 34 of file H1LarCalParameters.h.

Referenced by ClassImp(), SetResolutionSmearingFactors(), and ~H1LarCalParameters().

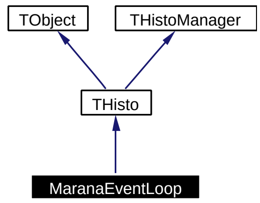
The documentation for this class was generated from the following files:

- **H1LarCalParameters.h**
- **H1LarCalParameters.C**

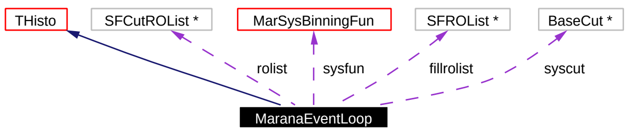
6.6 MaranaEventLoop Class Reference

`#include <MaranaEventLoop.h>`

Inheritance diagram for MaranaEventLoop:



Collaboration diagram for MaranaEventLoop:



Public Member Functions

- **MaranaEventLoop** (const **TRunHisto** &run, string Tag, string textfile="")
- ~**MaranaEventLoop** ()
- void **Fill** ()

  trigger self-filling process

- void **Draw** (TPad *pad, TVirtualPS *ps, Option_t *option, bool across, Int_t nx, Int_t ny, bool log, bool recursive)

  Draw all histograms in rolist.

- bool **ParseHistos** (istringstream &inParams, string &type, Int_t hoffset, string Tag, list< string > &PartTags, const Short_t SysNum=0)

  overwrite parsing from **THistoManager**

- void **ReadParamssfh1f** (istream &inParams, const string &type, Int_t hoffset, Short_t SysNum, Bool_t BookforSys)

  parse steering for self-filling set of 1d histograms

- void **ReadParamssfhprof** (istream &inParams, const string &type, Int_t hoffset, Short_t SysNum, Bool_t BookforSys)

  parse steering for self-filling set of profile histograms

- void **ReadParamssfh2f** (istream &inParams, const string &type, Int_t hoffset, Short_t SysNum, Bool_t BookforSys)

  parse steering for self-filling set of 2d histograms

- void **ReadParamsdef** (istream &inParams, Short_t SysNum) *parse steering for definition of function objects*

- void **ReadParamsbin** (istream &inParams, Short_t SysNum)

  parse steering for binning

- void **ReadParamssfseth1f** (istream &inParams, const string &type, Int_t hoffset, Short_t SysNum, Bool_t BookforSys)

  parse steering for self-filling differential set of 1d histograms

- void **ReadParamstypecut** (istream &inParams, const string &type)

  parse steering for cut definition for a type

Static Public Member Functions

- Binning ∗ **ReadBinningInfo** (istream &is)

  Read in binning information.

- **BinningFun** ∗ **ReadBinningFunInfo** (istream &is)

  Read in binning function information.

- std::string **ReadString** (istream &is, char delim='\0')

  Read in a string (with or without quotation marks), remove leading and trailing spaces.

Private Attributes

- SFROList ∗ **fillrolist**

  The "master" list of all self-filling objects.

- SFCutROList ∗ **rolist**

  A pointer to the "current" list of all self-filling objects.

- **MarSysBinningFun** ∗ **sysfun**
- **BaseCut** ∗ **syscut**

6.6.1 Constructor & Destructor Documentation

6.6.1.1 MaranaEventLoop::MaranaEventLoop (const TRunHisto & *run*, string *Tag*, string *textfile* = "")

6.6.1.2 MaranaEventLoop::∼MaranaEventLoop ()

Definition at line 139 of file MaranaEventLoop.C.

6.6.2 Member Function Documentation

6.6.2.1 void MaranaEventLoop::Fill ()

trigger self-filling process

Definition at line 143 of file MaranaEventLoop.C.

References fillrolist.

Referenced by main().

6.6.2.2 void MaranaEventLoop::Draw (TPad * *pad*, TVirtualPS * *ps*, Option_t * *option*, bool *across*, Int_t *nx*, Int_t *ny*, bool *log*, bool *recursive*)

Draw all histograms in rolist.

Definition at line 150 of file MaranaEventLoop.C.

References fillrolist.

Referenced by main().

6.6.2.3 bool MaranaEventLoop::ParseHistos (istringstream & *inParams*, string & *type*, Int_t *hoffset*, string *Tag*, list< string > & *PartTags*, const Short_t *SysNum* = 0) `[virtual]`

overwrite parsing from **THistoManager**

Parameters:

- ***inParams*** The input stream
- ***type*** The type name string
- ***hoffset*** The number offset for the histograms
- ***Tag*** The tag string, i.e. the name of the steering file
- ***SysNum*** The systematics number

Reimplemented from **THistoManager** (p. 61).

Definition at line 161 of file MaranaEventLoop.C.

References fillrolist, THistoManager::ReadParams1binfh1f(), THistoManager::ReadParams1binVarSizeh1f(), THistoManager::ReadParams1binvh1f(), THistoManager::ReadParams2binfh1f(), THistoManager::ReadParams2binvh1f(), THistoManager::ReadParams2dbin(), ReadParamsbin(), ReadParamsdef(), THistoManager::ReadParamsh1f(), THistoManager::ReadParamsh1fgeneric(), THistoManager::ReadParamsh2f(), ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), ReadParamssfseth1f(), ReadParamstypecut(), and rolist.

6.6.2.4 void MaranaEventLoop::ReadParamssfh1f (istream & *inParams*, const string & *type*, Int_t *hoffset*, Short_t *SysNum*, Bool_t *BookforSys*)

parse steering for self-filling set of 1d histograms

Parameters:

- ***inParams*** The input stream

type The type name string

hoffset The number offset for the histograms

SysNum The systematics number

BookforSys Flag whether systematics histos should also be booked

Definition at line 291 of file MaranaEventLoop.C.

References ReadBinningInfo(), ReadString(), rolist, syscut, and sysfun.

Referenced by ParseHistos().

6.6.2.5 void MaranaEventLoop::ReadParamssfhprof (istream & *inParams*, const string & *type*, Int_t *hoffset*, Short_t *SysNum*, Bool_t *BookforSys*)

parse steering for self-filling set of profile histograms

Parameters:

inParams The input stream

type The type name string

hoffset The number offset for the histograms

SysNum The systematics number

BookforSys Flag whether systematics histos should also be booked

Definition at line 373 of file MaranaEventLoop.C.

References ReadBinningInfo(), ReadString(), rolist, syscut, and sysfun.

Referenced by ParseHistos().

6.6.2.6 void MaranaEventLoop::ReadParamssfh2f (istream & *inParams*, const string & *type*, Int_t *hoffset*, Short_t *SysNum*, Bool_t *BookforSys*)

parse steering for self-filling set of 2d histograms

Parameters:

inParams The input stream

type The type name string

hoffset The number offset for the histograms

SysNum The systematics number

BookforSys Flag whether systematics histos should also be booked

Definition at line 468 of file MaranaEventLoop.C.

References ReadBinningInfo(), ReadString(), rolist, syscut, and sysfun.

Referenced by ParseHistos().

6.6.2.7 void MaranaEventLoop::ReadParamsdef (istream & *inParams*, Short_t *SysNum*)

parse steering for definition of function objects

Parameters:

inParams The input stream

SysNum The systematics number

Definition at line 563 of file MaranaEventLoop.C.

Referenced by ParseHistos().

6.6.2.8 void MaranaEventLoop::ReadParamsbin (istream & *inParams*, Short_t *SysNum*)

parse steering for binning

Parameters:

inParams The input stream

SysNum The systematics number

Definition at line 695 of file MaranaEventLoop.C.

References ReadBinningInfo().

Referenced by ParseHistos().

6.6.2.9 void MaranaEventLoop::ReadParamssfseth1f (istream & *inParams*, const string & *type*, Int_t *hoffset*, Short_t *SysNum*, Bool_t *BookforSys*)

parse steering for self-filling differential set of 1d histograms

Parameters:

inParams The input stream

type The type name string

hoffset The number offset for the histograms

SysNum The systematics number

BookforSys Flag whether systematics histos should also be booked

Definition at line 609 of file MaranaEventLoop.C.

References ReadBinningFunInfo(), ReadBinningInfo(), ReadString(), rolist, syscut, and sysfun.

Referenced by ParseHistos().

6.6.2.10 void MaranaEventLoop::ReadParamstypecut (istream & *inParams*, const string & *type*)

parse steering for cut definition for a type

Parameters:

inParams The input stream

type The type name string

Definition at line 732 of file MaranaEventLoop.C.

References ReadString(), and rolist.

Referenced by ParseHistos().

6.6.2.11 Binning ∗ MaranaEventLoop::ReadBinningInfo (istream & *is*) `[static]`

Read in binning information.

There are three types of binnings that can be read in by this function:

- Named binnings (existing Binning objects): Characterized by the name
- equidistant binning: Characterized by three numbers: nbins xlow xup
- non-equidistant binning: Characterized by the bin edges in curly braces: {x0 x1 ... xn}

Definition at line 764 of file MaranaEventLoop.C.

Referenced by ReadBinningFunInfo(), ReadParamsbin(), ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), and ReadParamssfseth1f().

6.6.2.12 BinningFun ∗ MaranaEventLoop::ReadBinningFunInfo (istream & *is*) `[static]`

Read in binning function information.

A **BinningFun** definition consists of a **FloatFun** function object plus a binning in [] brackets

Examples: Q2h is a **FloatFun** object, Q2binning is a named binning:

```
[ Q2h Q2binning ]
[ Q2h 20 0 20000 ]
[ Q2h { 100 200 500 1000 2000 5000 10000 20000} ]
```

Warning: always insert a blank before the right ']' brace, otherwise the] may be considered a part of the binning name!

Definition at line 829 of file MaranaEventLoop.C.

References ReadBinningInfo().

Referenced by ReadParamssfseth1f().

6.6.2.13 std::string MaranaEventLoop::ReadString (istream & *is*, char *delim* = '\0') `[static]`

Read in a string (with or without quotation marks), remove leading and trailing spaces.

Parameters:

is The input stream

delim An optional delimiter (like ',') Definition at line 885 of file MaranaEventLoop.C.

Referenced by ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), ReadParamssfseth1f(), and ReadParamstypecut().

6.6.3 Member Data Documentation

6.6.3.1 SFROList* MaranaEventLoop::fillrolist [private]

The "master" list of all self-filling objects.

Definition at line 137 of file MaranaEventLoop.h.

Referenced by ClassImp(), Draw(), Fill(), and ParseHistos().

6.6.3.2 SFCutROList* MaranaEventLoop::rolist [private]

A pointer to the "current" list of all self-filling objects.

Definition at line 138 of file MaranaEventLoop.h.

Referenced by ClassImp(), ParseHistos(), ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), ReadParamssfseth1f(), and ReadParamstypecut().

6.6.3.3 MarSysBinningFun* MaranaEventLoop::sysfun [private]

Definition at line 139 of file MaranaEventLoop.h.

Referenced by ClassImp(), ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), and ReadParamssfseth1f().

6.6.3.4 BaseCut* MaranaEventLoop::syscut [private]

Definition at line 140 of file MaranaEventLoop.h.

Referenced by ClassImp(), ReadParamssfh1f(), ReadParamssfh2f(), ReadParamssfhprof(), and ReadParamssfseth1f().

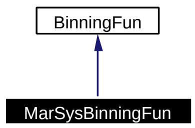
The documentation for this class was generated from the following files:

- **MaranaEventLoop.h**
- **MaranaEventLoop.C**

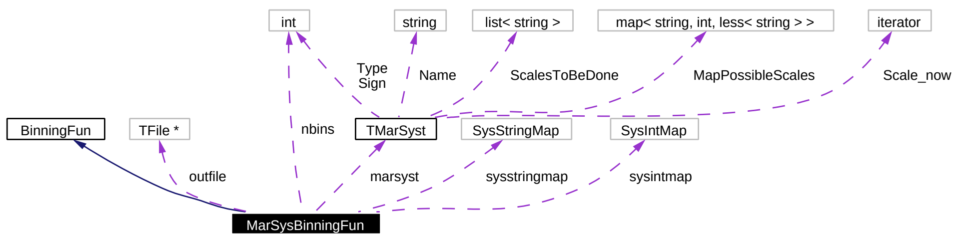
6.7 MarSysBinningFun Class Reference

`#include <MarSysBinningFun.h>`

Inheritance diagram for MarSysBinningFun:



Collaboration diagram for MarSysBinningFun:



Public Member Functions

- **MarSysBinningFun** (const **TMarSyst** &marsyst_, TFile *outfile_)

  Default: Create an empty binning.

- virtual int **operator()** () const

  Returns a bin number between -1 and **getNBins()***-1.*

- virtual const char * **getBinName** (int i) const

  returns a name string.

- virtual const char * **getBinTitle** (int i) const

  returns a title string.

- virtual int **getNBins** () const

Protected Types

- typedef map< string, int > **SysStringMap**
- typedef map< int, string > **SysIntMap**

Protected Member Functions

- virtual ~**MarSysBinningFun** ()

  Protected destructor to ensure creation on the heap.

Protected Attributes

- const **TMarSyst** & **marsyst**
- TFile * **outfile**
- int **nbins**
- **SysStringMap sysstringmap**
- **SysIntMap sysintmap**

6.7.1 Member Typedef Documentation

6.7.1.1 typedef map<string, int> MarSysBinningFun::SysStringMap `[protected]`

Definition at line 83 of file MarSysBinningFun.h.

6.7.1.2 typedef map<int, string> MarSysBinningFun::SysIntMap `[protected]`

Definition at line 84 of file MarSysBinningFun.h.

6.7.2 Constructor & Destructor Documentation

6.7.2.1 MarSysBinningFun::MarSysBinningFun (const TMarSyst & *marsyst_*, TFile * *outfile_*)

Default: Create an empty binning.

Definition at line 8 of file MarSysBinningFun.C.

References marsyst, nbins, TMarSyst::ScalesToBeDone, sysintmap, and sysstringmap.

6.7.2.2 virtual MarSysBinningFun::~MarSysBinningFun () `[inline, protected, virtual]`

Protected destructor to ensure creation on the heap.

Definition at line 91 of file MarSysBinningFun.h.

6.7.3 Member Function Documentation

6.7.3.1 int MarSysBinningFun::operator() () const `[virtual]`

Returns a bin number between -1 and **getNBins()**-1.

Definition at line 25 of file MarSysBinningFun.C.

References marsyst, TMarSyst::Name, and sysstringmap.

6.7.3.2 const char * MarSysBinningFun::getBinName (int *i*) const `[virtual]`

returns a name string.

The name string MAY, and MUST, be destroyed by the user! therefore: you MUST NOT return a string constant here, like "dummy", but use new[] to allocate the string. The name string should be short, unique, and contain no spaces, like "tbin0".

Parameters:
i The bin number

Definition at line 33 of file MarSysBinningFun.C.

References outfile, and sysintmap.

6.7.3.3 const char * MarSysBinningFun::getBinTitle (int *i*) const [virtual]

returns a title string.

The name string MAY, and MUST, be destroyed by the user! therefore: you MUST NOT return a string constant here, like "dummy", but use new[] to allocate the string. The name string should describe the bin, like "0.1 < t < 0.5".

Parameters:
i The bin number

Definition at line 43 of file MarSysBinningFun.C.

References sysintmap.

6.7.3.4 virtual int MarSysBinningFun::getNBins () const [inline, virtual]

Definition at line 80 of file MarSysBinningFun.h.

References nbins.

6.7.4 Member Data Documentation

6.7.4.1 const TMarSyst& MarSysBinningFun::marsyst [protected]

Definition at line 85 of file MarSysBinningFun.h.

Referenced by MarSysBinningFun(), and operator()().

6.7.4.2 TFile* MarSysBinningFun::outfile [protected]

Definition at line 86 of file MarSysBinningFun.h.

Referenced by getBinName().

6.7.4.3 int MarSysBinningFun::nbins [protected]

Definition at line 87 of file MarSysBinningFun.h.

Referenced by getNBins(), and MarSysBinningFun().

6.7.4.4 SysStringMap MarSysBinningFun::sysstringmap [protected]

Definition at line 88 of file MarSysBinningFun.h.

Referenced by MarSysBinningFun(), and operator()().

6.7.4.5 SysIntMap MarSysBinningFun::sysintmap [protected]

Definition at line 89 of file MarSysBinningFun.h.

Referenced by getBinName(), getBinTitle(), and MarSysBinningFun().

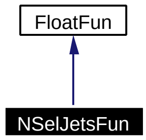
The documentation for this class was generated from the following files:

- **MarSysBinningFun.h**
- **MarSysBinningFun.C**

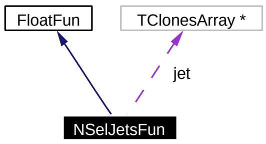
6.8 NSelJetsFun Class Reference

`#include <Funs.h>`

Inheritance diagram for NSelJetsFun:



Collaboration diagram for NSelJetsFun:



6.8.1 Detailed Description

FloatFun returning number of selected jets from **TMarEvent**.

Definition at line 20 of file Funs.h.

Public Member Functions

- **NSelJetsFun** (TClonesArray ∗jet_, const std::string &name_)

  Constructor.

- virtual float **operator()** () const

Protected Member Functions

- virtual ∼**NSelJetsFun** ()

  Protected destructor ensures creation on the heap.

Protected Attributes

- TClonesArray ∗ **jet**

6.8.2 Constructor & Destructor Documentation

6.8.2.1 NSelJetsFun::NSelJetsFun (TClonesArray * *jet_*, const std::string & *name_*) [inline]

Constructor.

Parameters:
*name_* The object's name

Definition at line 23 of file Funs.h.

References jet.

6.8.2.2 virtual NSelJetsFun::~NSelJetsFun () [inline, protected, virtual]

Protected destructor ensures creation on the heap.

Definition at line 35 of file Funs.h.

6.8.3 Member Function Documentation

6.8.3.1 virtual float NSelJetsFun::operator() () const [inline, virtual]

Definition at line 28 of file Funs.h.

References jet.

6.8.4 Member Data Documentation

6.8.4.1 TClonesArray* NSelJetsFun::jet [protected]

Definition at line 33 of file Funs.h.

Referenced by NSelJetsFun(), and operator()().

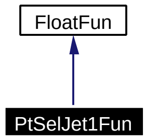
The documentation for this class was generated from the following file:

- **Funs.h**

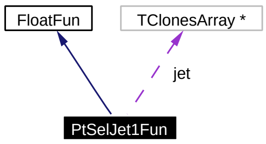
6.9 PtSelJet1Fun Class Reference

`#include <Funs.h>`

Inheritance diagram for PtSelJet1Fun:



Collaboration diagram for PtSelJet1Fun:



6.9.1 Detailed Description

FloatFun returning highest pt selected jets from **TMarEvent**.

Definition at line 39 of file Funs.h.

Public Member Functions

- **PtSelJet1Fun** (TClonesArray ∗jet_, const std::string &name_)

  Constructor.

- virtual float **operator()** () const

Protected Member Functions

- virtual ∼**PtSelJet1Fun** ()

  Protected destructor ensures creation on the heap.

Protected Attributes

- TClonesArray ∗ **jet**

6.9.2 Constructor & Destructor Documentation

6.9.2.1 PtSelJet1Fun::PtSelJet1Fun (TClonesArray * *jet_*, const std::string & *name_*) [inline]

Constructor.

Parameters:
*name_* The object's name

Definition at line 42 of file Funs.h.

References jet.

6.9.2.2 virtual PtSelJet1Fun::~PtSelJet1Fun () [inline, protected, virtual]

Protected destructor ensures creation on the heap.

Definition at line 61 of file Funs.h.

6.9.3 Member Function Documentation

6.9.3.1 virtual float PtSelJet1Fun::operator() () const [inline, virtual]

Definition at line 47 of file Funs.h.

References TMarBody::GetPt(), and jet.

6.9.4 Member Data Documentation

6.9.4.1 TClonesArray* PtSelJet1Fun::jet [protected]

Definition at line 59 of file Funs.h.

Referenced by operator()(), and PtSelJet1Fun().

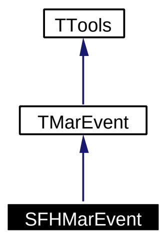
The documentation for this class was generated from the following file:

- **Funs.h**

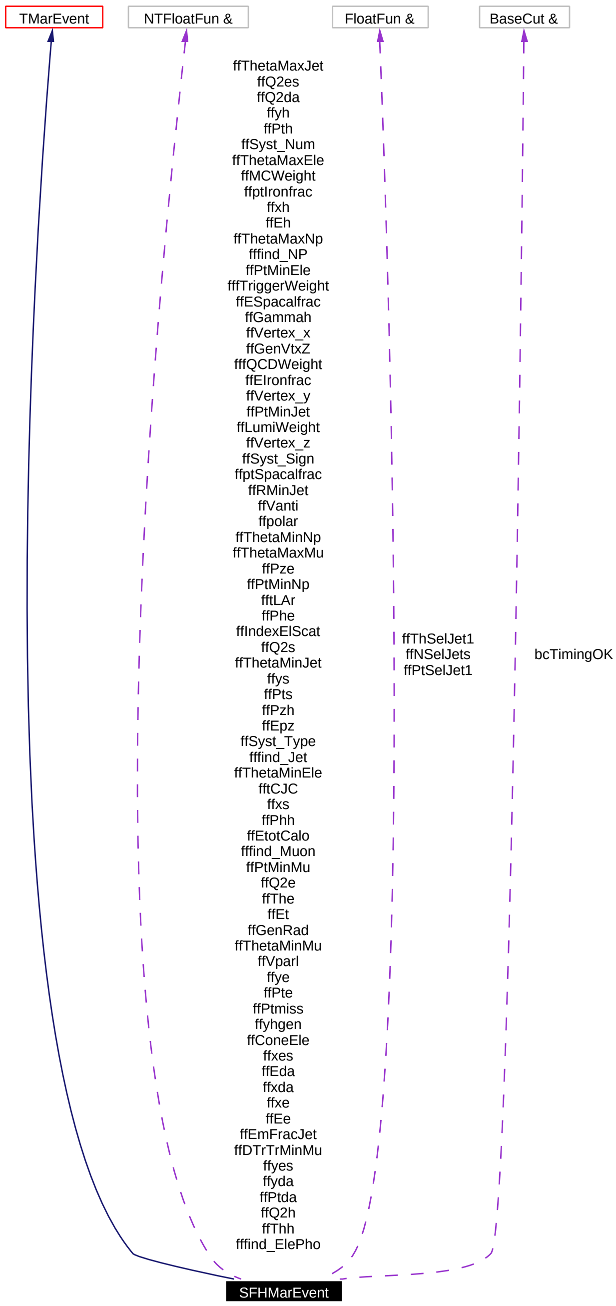
6.10 SFHMarEvent Class Reference

`#include <SFHMarEvent.h>`

Inheritance diagram for SFHMarEvent:



Collaboration diagram for SFHMarEvent:



Public Member Functions

- **SFHMarEvent** (const **TRun** ∗run)
- virtual ∼**SFHMarEvent** ()

Public Attributes

- NTFloatFun & **fffind_ElePho**
- NTFloatFun & **fffind_Muon**

- NTFloatFun & **fffind_Jet**
- NTFloatFun & **fffind_NP**
- NTFloatFun & **ffGenVtxZ**
- NTFloatFun & **ffyhgen**
- NTFloatFun & **ffGenRad**
- NTFloatFun & **ffSyst_Type**
- NTFloatFun & **ffSyst_Num**
- NTFloatFun & **ffSyst_Sign**
- NTFloatFun & **ffpolar**
- NTFloatFun & **ffVertex_x**
- NTFloatFun & **ffVertex_y**
- NTFloatFun & **ffVertex_z**
- NTFloatFun & **ffEpz**
- NTFloatFun & **ffPtmiss**
- NTFloatFun & **ffEt**
- NTFloatFun & **ffIndexElScat**
- NTFloatFun & **ffPte**
- NTFloatFun & **ffEe**
- NTFloatFun & **ffPze**
- NTFloatFun & **ffThe**
- NTFloatFun & **ffPhe**
- NTFloatFun & **ffQ2e**
- NTFloatFun & **ffye**
- NTFloatFun & **ffxe**
- NTFloatFun & **ffEtotCalo**
- NTFloatFun & **ffPth**
- NTFloatFun & **ffThh**
- NTFloatFun & **ffPhh**
- NTFloatFun & **ffEh**
- NTFloatFun & **ffPzh**
- NTFloatFun & **ffQ2h**
- NTFloatFun & **ffyh**
- NTFloatFun & **ffxh**
- NTFloatFun & **ffGammah**
- NTFloatFun & **ffptIronfrac**
- NTFloatFun & **ffEIronfrac**
- NTFloatFun & **ffptSpacalfrac**
- NTFloatFun & **ffESpacalfrac**
- NTFloatFun & **ffPtda**
- NTFloatFun & **ffQ2da**
- NTFloatFun & **ffyda**
- NTFloatFun & **ffxda**
- NTFloatFun & **ffEda**
- NTFloatFun & **ffPts**
- NTFloatFun & **ffQ2s**
- NTFloatFun & **ffys**
- NTFloatFun & **ffxs**
- NTFloatFun & **ffQ2es**
- NTFloatFun & **ffxes**
- NTFloatFun & **ffyes**

- NTFloatFun & **fftCJC**
- NTFloatFun & **fftLAr**
- NTFloatFun & **ffMCWeight**
- NTFloatFun & **ffLumiWeight**
- NTFloatFun & **fffTriggerWeight**
- NTFloatFun & **fffQCDWeight**
- NTFloatFun & **ffVparl**
- NTFloatFun & **ffVanti**
- NTFloatFun & **ffPtMinEle**
- NTFloatFun & **ffThetaMinEle**
- NTFloatFun & **ffThetaMaxEle**
- NTFloatFun & **ffConeEle**
- NTFloatFun & **ffPtMinMu**
- NTFloatFun & **ffThetaMinMu**
- NTFloatFun & **ffThetaMaxMu**
- NTFloatFun & **ffDTrTrMinMu**
- NTFloatFun & **ffPtMinJet**
- NTFloatFun & **ffThetaMinJet**
- NTFloatFun & **ffThetaMaxJet**
- NTFloatFun & **ffRMinJet**
- NTFloatFun & **ffEmFracJet**
- NTFloatFun & **ffPtMinNp**
- NTFloatFun & **ffThetaMinNp**
- NTFloatFun & **ffThetaMaxNp**
- **FloatFun** & **ffNSelJets**
- **FloatFun** & **ffPtSelJet1**
- **FloatFun** & **ffThSelJet1**
- **BaseCut** & **bcTimingOK**

6.10.1 Constructor & Destructor Documentation

6.10.1.1 SFHMarEvent::SFHMarEvent (const TRun ∗ *run*)

Definition at line 58 of file SFHMarEvent.C.

References TMarEvent::Il1ac, TMarEvent::Il1rw, TMarEvent::Il1te, TMarEvent::PartCalEm, TMarEvent::PartCalJet, and TMarEvent::PartCalMuon.

6.10.1.2 SFHMarEvent::∼SFHMarEvent () `[virtual]`

Definition at line 242 of file SFHMarEvent.C.

6.10.2 Member Data Documentation

6.10.2.1 NTFloatFun& SFHMarEvent::fffind_ElePho

Definition at line 26 of file SFHMarEvent.h.

6.10.2.2 NTFloatFun& SFHMarEvent::fffind_Muon

Definition at line 27 of file SFHMarEvent.h.

6.10.2.3 NTFloatFun& SFHMarEvent::fffind_Jet

Definition at line 28 of file SFHMarEvent.h.

6.10.2.4 NTFloatFun& SFHMarEvent::fffind_NP

Definition at line 29 of file SFHMarEvent.h.

6.10.2.5 NTFloatFun& SFHMarEvent::ffGenVtxZ

Definition at line 69 of file SFHMarEvent.h.

6.10.2.6 NTFloatFun& SFHMarEvent::ffyhgen

Definition at line 70 of file SFHMarEvent.h.

6.10.2.7 NTFloatFun& SFHMarEvent::ffGenRad

Definition at line 71 of file SFHMarEvent.h.

6.10.2.8 NTFloatFun& SFHMarEvent::ffSyst_Type

Definition at line 77 of file SFHMarEvent.h.

6.10.2.9 NTFloatFun& SFHMarEvent::ffSyst_Num

Definition at line 78 of file SFHMarEvent.h.

6.10.2.10 NTFloatFun& SFHMarEvent::ffSyst_Sign

Definition at line 79 of file SFHMarEvent.h.

6.10.2.11 NTFloatFun& SFHMarEvent::ffpolar

Definition at line 95 of file SFHMarEvent.h.

6.10.2.12 NTFloatFun& SFHMarEvent::ffVertex_x

Definition at line 98 of file SFHMarEvent.h.

6.10.2.13 NTFloatFun& SFHMarEvent::ffVertex_y

Definition at line 99 of file SFHMarEvent.h.

6.10.2.14 NTFloatFun& SFHMarEvent::ffVertex_z

Definition at line 100 of file SFHMarEvent.h.

6.10.2.15 NTFloatFun& SFHMarEvent::ffEpz

Definition at line 101 of file SFHMarEvent.h.

6.10.2.16 NTFloatFun& SFHMarEvent::ffPtmiss

Definition at line 102 of file SFHMarEvent.h.

6.10.2.17 NTFloatFun& SFHMarEvent::ffEt

Definition at line 103 of file SFHMarEvent.h.

6.10.2.18 NTFloatFun& SFHMarEvent::ffIndexElScat

Definition at line 106 of file SFHMarEvent.h.

6.10.2.19 NTFloatFun& SFHMarEvent::ffPte

Definition at line 107 of file SFHMarEvent.h.

6.10.2.20 NTFloatFun& SFHMarEvent::ffEe

Definition at line 108 of file SFHMarEvent.h.

6.10.2.21 NTFloatFun& SFHMarEvent::ffPze

Definition at line 109 of file SFHMarEvent.h.

6.10.2.22 NTFloatFun& SFHMarEvent::ffThe

Definition at line 110 of file SFHMarEvent.h.

6.10.2.23 NTFloatFun& SFHMarEvent::ffPhe

Definition at line 111 of file SFHMarEvent.h.

6.10.2.24 NTFloatFun& SFHMarEvent::ffQ2e

Definition at line 112 of file SFHMarEvent.h.

6.10.2.25 NTFloatFun& SFHMarEvent::ffye

Definition at line 113 of file SFHMarEvent.h.

6.10.2.26 NTFloatFun& SFHMarEvent::ffxe

Definition at line 114 of file SFHMarEvent.h.

6.10.2.27 NTFloatFun& SFHMarEvent::ffEtotCalo

Definition at line 118 of file SFHMarEvent.h.

6.10.2.28 NTFloatFun& SFHMarEvent::ffPth

Definition at line 120 of file SFHMarEvent.h.

6.10.2.29 NTFloatFun& SFHMarEvent::ffThh

Definition at line 121 of file SFHMarEvent.h.

6.10.2.30 NTFloatFun& SFHMarEvent::ffPhh

Definition at line 122 of file SFHMarEvent.h.

6.10.2.31 NTFloatFun& SFHMarEvent::ffEh

Definition at line 123 of file SFHMarEvent.h.

6.10.2.32 NTFloatFun& SFHMarEvent::ffPzh

Definition at line 124 of file SFHMarEvent.h.

6.10.2.33 NTFloatFun& SFHMarEvent::ffQ2h

Definition at line 125 of file SFHMarEvent.h.

6.10.2.34 NTFloatFun& SFHMarEvent::ffyh

Definition at line 126 of file SFHMarEvent.h.

6.10.2.35 NTFloatFun& SFHMarEvent::ffxh

Definition at line 127 of file SFHMarEvent.h.

6.10.2.36 NTFloatFun& SFHMarEvent::ffGammah

Definition at line 128 of file SFHMarEvent.h.

6.10.2.37 NTFloatFun& SFHMarEvent::ffptIronfrac

Definition at line 131 of file SFHMarEvent.h.

6.10.2.38 NTFloatFun& SFHMarEvent::ffEIronfrac

Definition at line 132 of file SFHMarEvent.h.

6.10.2.39 NTFloatFun& SFHMarEvent::ffptSpacalfrac

Definition at line 133 of file SFHMarEvent.h.

6.10.2.40 NTFloatFun& SFHMarEvent::ffESpacalfrac

Definition at line 134 of file SFHMarEvent.h.

6.10.2.41 NTFloatFun& SFHMarEvent::ffPtda

Definition at line 138 of file SFHMarEvent.h.

6.10.2.42 NTFloatFun& SFHMarEvent::ffQ2da

Definition at line 139 of file SFHMarEvent.h.

6.10.2.43 NTFloatFun& SFHMarEvent::ffyda

Definition at line 140 of file SFHMarEvent.h.

6.10.2.44 NTFloatFun& SFHMarEvent::ffxda

Definition at line 141 of file SFHMarEvent.h.

6.10.2.45 NTFloatFun& SFHMarEvent::ffEda

Definition at line 142 of file SFHMarEvent.h.

6.10.2.46 NTFloatFun& SFHMarEvent::ffPts

Definition at line 144 of file SFHMarEvent.h.

6.10.2.47 NTFloatFun& SFHMarEvent::ffQ2s

Definition at line 145 of file SFHMarEvent.h.

6.10.2.48 NTFloatFun& SFHMarEvent::ffys

Definition at line 146 of file SFHMarEvent.h.

6.10.2.49 NTFloatFun& SFHMarEvent::ffxs

Definition at line 147 of file SFHMarEvent.h.

6.10.2.50 NTFloatFun& SFHMarEvent::ffQ2es

Definition at line 149 of file SFHMarEvent.h.

6.10.2.51 NTFloatFun& SFHMarEvent::ffxes

Definition at line 150 of file SFHMarEvent.h.

6.10.2.52 NTFloatFun& SFHMarEvent::ffyes

Definition at line 151 of file SFHMarEvent.h.

6.10.2.53 NTFloatFun& SFHMarEvent::fftCJC

Definition at line 155 of file SFHMarEvent.h.

6.10.2.54 NTFloatFun& SFHMarEvent::fftLAr

Definition at line 156 of file SFHMarEvent.h.

6.10.2.55 NTFloatFun& SFHMarEvent::ffMCWeight

Definition at line 159 of file SFHMarEvent.h.

6.10.2.56 NTFloatFun& SFHMarEvent::ffLumiWeight

Definition at line 160 of file SFHMarEvent.h.

6.10.2.57 NTFloatFun& SFHMarEvent::fffTriggerWeight

Definition at line 161 of file SFHMarEvent.h.

6.10.2.58 NTFloatFun& SFHMarEvent::fffQCDWeight

Definition at line 162 of file SFHMarEvent.h.

6.10.2.59 NTFloatFun& SFHMarEvent::ffVparl

Definition at line 165 of file SFHMarEvent.h.

6.10.2.60 NTFloatFun& SFHMarEvent::ffVanti

Definition at line 166 of file SFHMarEvent.h.

6.10.2.61 NTFloatFun& SFHMarEvent::ffPtMinEle

Definition at line 172 of file SFHMarEvent.h.

6.10.2.62 NTFloatFun& SFHMarEvent::ffThetaMinEle

Definition at line 173 of file SFHMarEvent.h.

6.10.2.63 NTFloatFun& SFHMarEvent::ffThetaMaxEle

Definition at line 174 of file SFHMarEvent.h.

6.10.2.64 NTFloatFun& SFHMarEvent::ffConeEle

Definition at line 175 of file SFHMarEvent.h.

6.10.2.65 NTFloatFun& SFHMarEvent::ffPtMinMu

Definition at line 178 of file SFHMarEvent.h.

6.10.2.66 NTFloatFun& SFHMarEvent::ffThetaMinMu

Definition at line 179 of file SFHMarEvent.h.

6.10.2.67 NTFloatFun& SFHMarEvent::ffThetaMaxMu

Definition at line 180 of file SFHMarEvent.h.

6.10.2.68 NTFloatFun& SFHMarEvent::ffDTrTrMinMu

Definition at line 181 of file SFHMarEvent.h.

6.10.2.69 NTFloatFun& SFHMarEvent::ffPtMinJet

Definition at line 184 of file SFHMarEvent.h.

6.10.2.70 NTFloatFun& SFHMarEvent::ffThetaMinJet

Definition at line 185 of file SFHMarEvent.h.

6.10.2.71 NTFloatFun& SFHMarEvent::ffThetaMaxJet

Definition at line 186 of file SFHMarEvent.h.

6.10.2.72 NTFloatFun& SFHMarEvent::ffRMinJet

Definition at line 187 of file SFHMarEvent.h.

6.10.2.73 NTFloatFun& SFHMarEvent::ffEmFracJet

Definition at line 188 of file SFHMarEvent.h.

6.10.2.74 NTFloatFun& SFHMarEvent::ffPtMinNp

Definition at line 191 of file SFHMarEvent.h.

6.10.2.75 NTFloatFun& SFHMarEvent::ffThetaMinNp

Definition at line 192 of file SFHMarEvent.h.

6.10.2.76 NTFloatFun& SFHMarEvent::ffThetaMaxNp

Definition at line 193 of file SFHMarEvent.h.

6.10.2.77 FloatFun& SFHMarEvent::ffNSelJets

Definition at line 220 of file SFHMarEvent.h.

6.10.2.78 FloatFun& SFHMarEvent::ffPtSelJet1

Definition at line 221 of file SFHMarEvent.h.

6.10.2.79 FloatFun& SFHMarEvent::ffThSelJet1

Definition at line 222 of file SFHMarEvent.h.

6.10.2.80 BaseCut& SFHMarEvent::bcTimingOK

Definition at line 224 of file SFHMarEvent.h.

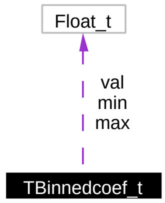
The documentation for this class was generated from the following files:

- **SFHMarEvent.h**
- **SFHMarEvent.C**

6.11 TBinnedcoef_t Struct Reference

`#include <TMarJetCal.h>`

Collaboration diagram for TBinnedcoef_t:



Public Attributes

- Float_t **min**
- Float_t **max**
- Float_t **val** [NBCOEFS]

6.11.1 Member Data Documentation

6.11.1.1 Float_t TBinnedcoef_t::min

Definition at line 43 of file TMarJetCal.h.

Referenced by TMarJetCal::ApplyCalib(), TMarJetCal::ApplyHadroo2Calib(), TMarJetCal::MyHadroo2KtJetCalibration(), TMarJetCal::MyHadroo2TestJetCalibration(), and TMarJetCal::TMarJetCal().

6.11.1.2 Float_t TBinnedcoef_t::max

Definition at line 44 of file TMarJetCal.h.

6.11.1.3 Float_t TBinnedcoef_t::val[NBCOEFS]

Definition at line 45 of file TMarJetCal.h.

Referenced by TMarJetCal::ApplyHadroo2Calib(), TMarJetCal::MyHadroo2KtJetCalibration(), TMarJetCal::MyHadroo2TestJetCalibration(), and TMarJetCal::TMarJetCal().

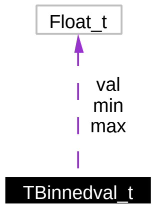
The documentation for this struct was generated from the following file:

- **TMarJetCal.h**

6.12 TBinnedval_t Struct Reference

`#include <TMarJetCal.h>`

Collaboration diagram for TBinnedval_t:



Public Attributes

- Float_t **min**
- Float_t **max**
- Float_t **val**

6.12.1 Member Data Documentation

6.12.1.1 Float_t TBinnedval_t::min

Definition at line 35 of file TMarJetCal.h.

Referenced by TMarJetCal::TMarJetCal().

6.12.1.2 Float_t TBinnedval_t::max

Definition at line 36 of file TMarJetCal.h.

6.12.1.3 Float_t TBinnedval_t::val

Definition at line 37 of file TMarJetCal.h.

Referenced by TMarJetCal::TMarJetCal().

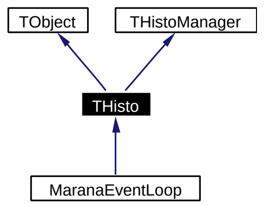
The documentation for this struct was generated from the following file:

- **TMarJetCal.h**

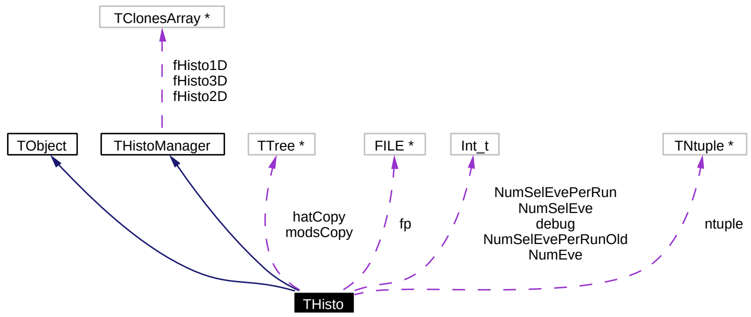
6.13 THisto Class Reference

`#include <THisto.h>`

Inheritance diagram for THisto:



Collaboration diagram for THisto:



Public Member Functions

- **THisto** ()
- **THisto** (const **TRunHisto** &run, string Tag, string textfile="")
- ~**THisto** ()
- virtual void **FillLumi** (**TMarEvent** &event)
- virtual void **Print** (const **TMarEvent** &event)
- virtual Bool_t **Cut** (**TMarEvent** &event)
- virtual **THisto** & **FillPreCut** (**TMarEvent** &event)
- virtual void **FillPhyPlot** (**TMarEvent** &event)
- virtual void **FillControlPlot** (**TMarEvent** &event)

Public Attributes

- TTree * **hatCopy**
- TTree * **modsCopy**
- TNtuple * **ntuple**
- FILE * **fp**
- Int_t **NumSelEve**

  File pointer.

- Int_t **NumEve**
- Int_t **NumSelEvePerRun**
- Int_t **NumSelEvePerRunOld**
- Int_t **debug**

6.13.1 Constructor & Destructor Documentation

6.13.1.1 THisto::THisto ()

6.13.1.2 THisto::THisto (const TRunHisto & *run*, string *Tag*, string *textfile* = "")

Definition at line 24 of file THisto.C.

References TRun::debug, debug, fp, hatCopy, TRunHisto::histo_par_file, modsCopy, ntuple, NumEve, NumSelEve, NumSelEvePerRun, NumSelEvePerRunOld, TRunHisto::out_file_mods_hat, TRunHisto::output_file_root, THistoManager::ReadParameters(), and TRunHisto::TagToBeWritten.

6.13.1.3 THisto::~THisto ()

Definition at line 108 of file THisto.C.

References fp, hatCopy, and modsCopy.

6.13.2 Member Function Documentation

6.13.2.1 void THisto::FillLumi (TMarEvent & *event*) `[virtual]`

Definition at line 153 of file THisto.C.

References TMarEvent::lumi, TMarLumi::LumiPerRunOld, TTools::NewRun, TTools::num, NumSelEve, NumSelEvePerRun, NumSelEvePerRunOld, and TMarLumi::TotalLumiOld.

Referenced by Cut().

6.13.2.2 void THisto::Print (const TMarEvent & *event*) `[virtual]`

Definition at line 118 of file THisto.C.

References TTools::EventNumber, fp, and TTools::RunNumber.

6.13.2.3 Bool_t THisto::Cut (TMarEvent & *event*) `[virtual]`

Definition at line 131 of file THisto.C.

References FillLumi(), TTools::IsCosmic(), NumEve, NumSelEve, NumSelEvePerRun, TMarEvent::Syst_Type, and TMarEvent::Vertex.

6.13.2.4 virtual THisto& THisto::FillPreCut (TMarEvent & *event*) `[inline, virtual]`

Definition at line 80 of file THisto.h.

6.13.2.5 virtual void THisto::FillPhyPlot (TMarEvent & *event*) [inline, virtual]

Definition at line 83 of file THisto.h.

6.13.2.6 virtual void THisto::FillControlPlot (TMarEvent & *event*) [inline, virtual]

Definition at line 86 of file THisto.h.

6.13.3 Member Data Documentation

6.13.3.1 TTree∗ THisto::hatCopy

Definition at line 37 of file THisto.h.

Referenced by ClassImp(), THisto(), and ∼THisto().

6.13.3.2 TTree∗ THisto::modsCopy

Definition at line 40 of file THisto.h.

Referenced by ClassImp(), THisto(), and ∼THisto().

6.13.3.3 TNtuple∗ THisto::ntuple

Definition at line 43 of file THisto.h.

Referenced by THisto().

6.13.3.4 FILE∗ THisto::fp

Definition at line 46 of file THisto.h.

Referenced by ClassImp(), Print(), THisto(), and ∼THisto().

6.13.3.5 Int_t THisto::NumSelEve

File pointer.

Definition at line 50 of file THisto.h.

Referenced by ClassImp(), Cut(), FillLumi(), and THisto().

6.13.3.6 Int_t THisto::NumEve

Definition at line 53 of file THisto.h.

Referenced by ClassImp(), Cut(), and THisto().

6.13.3.7 Int_t THisto::NumSelEvePerRun

Definition at line 56 of file THisto.h.

Referenced by ClassImp(), Cut(), FillLumi(), and THisto().

6.13.3.8 Int_t THisto::NumSelEvePerRunOld

Definition at line 59 of file THisto.h.

Referenced by ClassImp(), FillLumi(), and THisto().

6.13.3.9 Int_t THisto::debug

Definition at line 62 of file THisto.h.

Referenced by ClassImp(), and THisto().

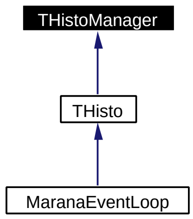
The documentation for this class was generated from the following files:

- **THisto.h**
- **THisto.C**

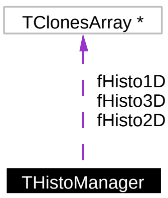
6.14 THistoManager Class Reference

`#include <THistoManager.h>`

Inheritance diagram for THistoManager:



Collaboration diagram for THistoManager:



Public Member Functions

- **THistoManager** ()
- **THistoManager** (string Parameters_file, string Tag)
- virtual ~**THistoManager** ()
- virtual void **ReadParameters** (string Parameters_file, string Tag, const Short_t SysNum=0)
- virtual void **ReadParameters** (string parameters_file, string Tag, string ClassName, list< string > &PartTags, const Short_t SysNum=0)
- virtual bool **ParseHistos** (istringstream &inParams, string &type, Int_t hoffset, string Tag, list< string > &PartTags, const Short_t SysNum=0)
- void **ReadParamsh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParamsh2f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParamsh1fgeneric** (istringstream &inParams, string type, Int_t hoffset, list< string > &PartTags, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParams2dbin** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0)
- void **ReadParams3dbin** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0)
- void **ReadParams1binfh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParams1binvh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)

- void **ReadParams1binVarSizeh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParams2binfh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **ReadParams2binvh1f** (istringstream &inParams, string type, Int_t hoffset, const Short_t SysNum=0, const Bool_t BookforSys=kFALSE)
- void **FillHisto** (const int &num, const double &value, const double &wait, const Short_t SysNum=0)
- void **FillHisto** (const int &num, const double &value_x, const double &value_y, const double &wait, const Short_t SysNum=0)
- void **FillHisto** (const int &num, const double &value_x, const double &value_y, const double &value_z, const double &wait, const Short_t SysNum=0)
- void **Fill1BinHisto** (Int_t hnum, Double_t binvalue, Double_t value, Double_t wait, const Short_t SysNum=0)
- void **Fill2BinHisto** (Int_t hnum, Double_t binvalue, Double_t binvalue2, Double_t value, Double_t wait, const Short_t SysNum=0)
- void **Scale1dHisto** (Int_t hnum, Float_t ScaleParam, const Short_t SysNum=0)

Public Attributes

- TClonesArray ∗ **fHisto1D** [40]
- TClonesArray ∗ **fHisto2D** [40]
- TClonesArray ∗ **fHisto3D** [40]

6.14.1 Constructor & Destructor Documentation

6.14.1.1 THistoManager::THistoManager ()

Definition at line 229 of file THistoManager.C.

References fHisto1D, fHisto2D, and fHisto3D.

6.14.1.2 THistoManager::THistoManager (string *Parameters_file*, string *Tag*)

Definition at line 238 of file THistoManager.C.

References fHisto1D, fHisto2D, fHisto3D, and ReadParameters().

6.14.1.3 THistoManager::∼THistoManager () `[virtual]`

Definition at line 248 of file THistoManager.C.

6.14.2 Member Function Documentation

6.14.2.1 void THistoManager::ReadParameters (string *Parameters_file*, string *Tag*, const Short_t *SysNum* = 0) `[virtual]`

Definition at line 6 of file THistoManager.C.

Referenced by ClassImp(), THisto::THisto(), and THistoManager().

6.14.2.2 void THistoManager::ReadParameters (string *parameters_file*, string *Tag*, string *ClassName*, list< string > & *PartTags*, const Short_t *SysNum* = 0) [virtual]

Definition at line 17 of file THistoManager.C.

References fHisto1D, fHisto2D, and ParseHistos().

6.14.2.3 bool THistoManager::ParseHistos (istringstream & *inParams*, string & *type*, Int_t *hoffset*, string *Tag*, list< string > & *PartTags*, const Short_t *SysNum* = 0) [virtual]

Reimplemented in **MaranaEventLoop** (p. 29).

Definition at line 144 of file THistoManager.C.

References ReadParams1binfh1f(), ReadParams1binVarSizeh1f(), ReadParams1binvh1f(), ReadParams2binfh1f(), ReadParams2binvh1f(), ReadParams2dbin(), ReadParams3dbin(), ReadParamsh1f(), ReadParamsh1fgeneric(), and ReadParamsh2f().

Referenced by ReadParameters().

6.14.2.4 void THistoManager::ReadParamsh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 446 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.5 void THistoManager::ReadParamsh2f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 490 of file THistoManager.C.

References fHisto2D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.6 void THistoManager::ReadParamsh1fgeneric (istringstream & *inParams*, string *type*, Int_t *hoffset*, list< string > & *PartTags*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 594 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.7 void THistoManager::ReadParams2dbin (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0)

Definition at line 945 of file THistoManager.C.

References fHisto2D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.8 void THistoManager::ReadParams3dbin (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0)

Definition at line 1005 of file THistoManager.C.

References fHisto3D.

Referenced by ParseHistos().

6.14.2.9 void THistoManager::ReadParams1binfh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 536 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.10 void THistoManager::ReadParams1binvh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 649 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.11 void THistoManager::ReadParams1binVarSizeh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 709 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.12 void THistoManager::ReadParams2binfh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 769 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.13 void THistoManager::ReadParams2binvh1f (istringstream & *inParams*, string *type*, Int_t *hoffset*, const Short_t *SysNum* = 0, const Bool_t *BookforSys* = kFALSE)

Definition at line 849 of file THistoManager.C.

References fHisto1D.

Referenced by ParseHistos(), and MaranaEventLoop::ParseHistos().

6.14.2.14 void THistoManager::FillHisto (const int & *num*, const double & *value*, const double & *wait*, const Short_t *SysNum* = 0)

Definition at line 268 of file THistoManager.C.

References fHisto1D.

6.14.2.15 void THistoManager::FillHisto (const int & *num*, const double & *value_x*, const double & *value_y*, const double & *wait*, const Short_t *SysNum* = 0)

Definition at line 296 of file THistoManager.C.

References fHisto2D.

6.14.2.16 void THistoManager::FillHisto (const int & *num*, const double & *value_x*, const double & *value_y*, const double & *value_z*, const double & *wait*, const Short_t *SysNum* = 0)

Definition at line 325 of file THistoManager.C.

References fHisto3D.

6.14.2.17 void THistoManager::Fill1BinHisto (Int_t *hnum*, Double_t *binvalue*, Double_t *value*, Double_t *wait*, const Short_t *SysNum* = 0)

Definition at line 355 of file THistoManager.C.

References fHisto1D.

6.14.2.18 void THistoManager::Fill2BinHisto (Int_t *hnum*, Double_t *binvalue*, Double_t *binvalue2*, Double_t *value*, Double_t *wait*, const Short_t *SysNum* = 0)

Definition at line 397 of file THistoManager.C.

References fHisto1D.

6.14.2.19 void THistoManager::Scale1dHisto (Int_t *hnum*, Float_t *ScaleParam*, const Short_t *SysNum* = 0)

Definition at line 1077 of file THistoManager.C.

References fHisto1D.

6.14.3 Member Data Documentation

6.14.3.1 TClonesArray∗ THistoManager::fHisto1D[40]

Definition at line 44 of file THistoManager.h.

Referenced by Fill1BinHisto(), Fill2BinHisto(), FillHisto(), ReadParameters(), ReadParams1binfh1f(), ReadParams1binVarSizeh1f(), ReadParams1binvh1f(), ReadParams2binfh1f(), ReadParams2binvh1f(), ReadParamsh1f(), ReadParamsh1fgeneric(), Scale1dHisto(), and THistoManager().

6.14.3.2 TClonesArray∗ THistoManager::fHisto2D[40]

Definition at line 45 of file THistoManager.h.

Referenced by FillHisto(), ReadParameters(), ReadParams2dbin(), ReadParamsh2f(), and THistoManager().

6.14.3.3 TClonesArray∗ THistoManager::fHisto3D[40]

Definition at line 46 of file THistoManager.h.

Referenced by FillHisto(), ReadParams3dbin(), and THistoManager().

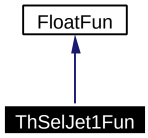
The documentation for this class was generated from the following files:

- **THistoManager.h**
- **THistoManager.C**

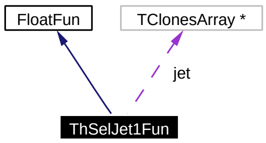
6.15 ThSelJet1Fun Class Reference

`#include <Funs.h>`

Inheritance diagram for ThSelJet1Fun:



Collaboration diagram for ThSelJet1Fun:



6.15.1 Detailed Description

FloatFun returning theta of highest pt selected jet from **TMarEvent**.

Definition at line 65 of file Funs.h.

Public Member Functions

- **ThSelJet1Fun** (TClonesArray ∗jet_, const std::string &name_)
  Constructor.
- virtual float **operator()** () const

Protected Member Functions

- virtual ∼**ThSelJet1Fun** ()
  Protected destructor ensures creation on the heap.

Protected Attributes

- TClonesArray ∗ **jet**

6.15.2 Constructor & Destructor Documentation

6.15.2.1 ThSelJet1Fun::ThSelJet1Fun (TClonesArray ∗ *jet_*, const std::string & *name_*) `[inline]`

Constructor.

Parameters:

name_ The object's name

Definition at line 68 of file Funs.h.

References jet.

6.15.2.2 virtual ThSelJet1Fun::~ThSelJet1Fun () [inline, protected, virtual]

Protected destructor ensures creation on the heap.

Definition at line 91 of file Funs.h.

6.15.3 Member Function Documentation

6.15.3.1 virtual float ThSelJet1Fun::operator() () const [inline, virtual]

Definition at line 73 of file Funs.h.

References TMarBody::GetPt(), TMarBody::GetTheta(), and jet.

6.15.4 Member Data Documentation

6.15.4.1 TClonesArray* ThSelJet1Fun::jet [protected]

Definition at line 89 of file Funs.h.

Referenced by operator()(), and ThSelJet1Fun().

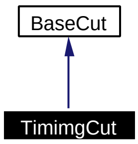
The documentation for this class was generated from the following file:

- **Funs.h**

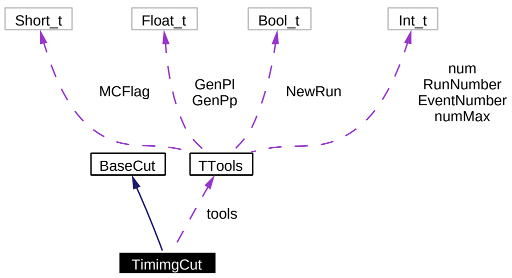
6.16 TimimgCut Class Reference

`#include <Funs.h>`

Inheritance diagram for TimimgCut:



Collaboration diagram for TimimgCut:



6.16.1 Detailed Description

FloatFun returning theta of highest pt selected jet from **TMarEvent**.

Definition at line 95 of file Funs.h.

Public Member Functions

- **TimimgCut** (**TTools** ∗tools_, const std::string &name_)

  Constructor.

- virtual bool **operator()** () const

Protected Member Functions

- virtual ∼**TimimgCut** ()

  Protected destructor ensures creation on the heap.

Protected Attributes

- **TTools** ∗ **tools**

6.16.2 Constructor & Destructor Documentation

6.16.2.1 TimimgCut::TimimgCut (TTools * *tools_*, const std::string & *name_*) [inline]

Constructor.

Parameters:

*name_* The object's name

Definition at line 98 of file Funs.h.

References tools.

6.16.2.2 virtual TimimgCut::~TimimgCut () [inline, protected, virtual]

Protected destructor ensures creation on the heap.

Definition at line 110 of file Funs.h.

6.16.3 Member Function Documentation

6.16.3.1 virtual bool TimimgCut::operator() () const [inline, virtual]

Definition at line 103 of file Funs.h.

References TTools::Is2004CalibratedTimingOK(), and tools.

6.16.4 Member Data Documentation

6.16.4.1 TTools* TimimgCut::tools [protected]

Definition at line 108 of file Funs.h.

Referenced by operator()(), and TimimgCut().

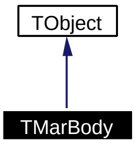
The documentation for this class was generated from the following file:

- **Funs.h**

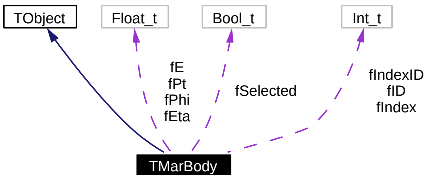
6.17 TMarBody Class Reference

`#include <TMarBody.h>`

Inheritance diagram for TMarBody:



Collaboration diagram for TMarBody:



Public Member Functions

- **TMarBody** ()
- **TMarBody** (**TMarBody** ∗body)
- **TMarBody** (Int_t ID, Int_t indexID, Int_t index=-1)
- **TMarBody** (const Int_t &ID, const Int_t &indexID, const Float_t &E, const Float_t &Pt, const Float_t &Eta, const Float_t &Phi, const Int_t &index=-1)
- ∼**TMarBody** ()
- Int_t **GetType** (void) const
- Int_t **GetIndex** (void) const
- Int_t **GetIndexID** (void) const
- Bool_t **GetEPtEtaPhi** (Float_t &E, Float_t &Pt, Float_t &Eta, Float_t &Phi) const
- Float_t **GetE** () const
- Float_t **GetPt** () const
- Float_t **GetEta** () const
- Float_t **GetTheta** () const
- Float_t **GetPhi** () const
- Float_t **GetP** () const
- Float_t **GetPx** () const
- Float_t **GetPy** () const
- Float_t **GetPz** () const
- TLorentzVector **GetFourVector** ()
- void **SetE** (const Float_t &E)
- void **SetPt** (const Float_t &Pt)
- void **SetEta** (const Float_t &Eta)
- void **SetPhi** (const Float_t &Phi)
- Bool_t **IsSel** (void)

- void **SetEPtEtaPhi** (Float_t E, Float_t Pt, Float_t Eta, Float_t Phi)
- void **SetSel** (Bool_t selection)
- virtual Int_t **Compare** (const **TObject** ∗body)
- Bool_t **IsEqual** (const **TMarBody** ∗body)
- virtual Bool_t **IsSortable** () const
- bool **operator**< (const **TMarBody** &other)
- Float_t **EtaPhiDist** (**TMarBody** ∗body)

Private Attributes

- Int_t **fIndex**
- Int_t **fIndexID**
- Int_t **fID**
- Float_t **fE**
- Float_t **fPt**
- Float_t **fEta**
- Float_t **fPhi**
- Bool_t **fSelected**

6.17.1 Constructor & Destructor Documentation

6.17.1.1 TMarBody::TMarBody ()

6.17.1.2 TMarBody::TMarBody (TMarBody ∗ *body*)

Definition at line 43 of file TMarBody.C.

References fE, fEta, fID, fIndex, fIndexID, fPhi, fPt, fSelected, GetEPtEtaPhi(), GetIndex(), GetIndexID(), GetType(), and IsSel().

6.17.1.3 TMarBody::TMarBody (Int_t *ID*, Int_t *indexID*, Int_t *index* = -1)

Definition at line 31 of file TMarBody.C.

References fE, fEta, fID, fIndex, fIndexID, fPhi, fPt, and fSelected.

6.17.1.4 TMarBody::TMarBody (const Int_t & *ID*, const Int_t & *indexID*, const Float_t & *E*, const Float_t & *Pt*, const Float_t & *Eta*, const Float_t & *Phi*, const Int_t & *index* = -1)

Definition at line 56 of file TMarBody.C.

References fE, fEta, fID, fIndex, fIndexID, fPhi, fPt, and fSelected.

6.17.1.5 TMarBody::∼TMarBody ()

Definition at line 71 of file TMarBody.C.

6.17.2 Member Function Documentation

6.17.2.1 Int_t TMarBody::GetType (void) const

Definition at line 77 of file TMarBody.C.

References fID.

Referenced by TMarBody().

6.17.2.2 Int_t TMarBody::GetIndex (void) const

Definition at line 84 of file TMarBody.C.

References fIndex.

Referenced by TMarBody().

6.17.2.3 Int_t TMarBody::GetIndexID (void) const

Definition at line 90 of file TMarBody.C.

References fIndexID.

Referenced by TMarEvent::FindJet(), TMarEvent::JJTriggerEfficiency(), and TMarBody().

6.17.2.4 Bool_t TMarBody::GetEPtEtaPhi (Float_t & *E*, Float_t & *Pt*, Float_t & *Eta*, Float_t & *Phi*) const

Definition at line 97 of file TMarBody.C.

References fE, fEta, fPhi, and fPt.

Referenced by TMarBody().

6.17.2.5 Float_t TMarBody::GetE () const

Definition at line 124 of file TMarBody.C.

References fE.

Referenced by TMarEvent::FindJet(), TMarEvent::MCGenSelection(), and TMarEvent::PrintEventInfo().

6.17.2.6 Float_t TMarBody::GetPt () const

Definition at line 137 of file TMarBody.C.

Referenced by Compare(), TMarEvent::FindJet(), IsEqual(), ThSelJet1Fun::operator()(), PtSelJet1Fun::operator()(), and TMarEvent::PrintEventInfo().

6.17.2.7 Float_t TMarBody::GetEta () const

Definition at line 143 of file TMarBody.C.

References fEta.

Referenced by EtaPhiDist(), and IsEqual().

6.17.2.8 Float_t TMarBody::GetTheta () const

Definition at line 150 of file TMarBody.C.

References fEta.

Referenced by TMarEvent::FindJet(), ThSelJet1Fun::operator()(), and TMarEvent::PrintEventInfo().

6.17.2.9 Float_t TMarBody::GetPhi () const

Definition at line 158 of file TMarBody.C.

References fPhi.

Referenced by EtaPhiDist(), TMarEvent::FindJet(), IsEqual(), and TMarEvent::PrintEventInfo().

6.17.2.10 Float_t TMarBody::GetP () const

Definition at line 130 of file TMarBody.C.

References fE.

Referenced by GetPx(), GetPy(), and GetPz().

6.17.2.11 Float_t TMarBody::GetPx () const

Definition at line 165 of file TMarBody.C.

References GetP().

Referenced by TMarEvent::MCGenSelection().

6.17.2.12 Float_t TMarBody::GetPy () const

Definition at line 171 of file TMarBody.C.

References GetP().

Referenced by TMarEvent::MCGenSelection().

6.17.2.13 Float_t TMarBody::GetPz () const

Definition at line 178 of file TMarBody.C.

References GetP().

Referenced by TMarEvent::MCGenSelection().

6.17.2.14 TLorentzVector TMarBody::GetFourVector ()

Definition at line 236 of file TMarBody.C.

References fE, fEta, fPhi, and fPt.

6.17.2.15 void TMarBody::SetE (const Float_t & *E*) [inline]

Definition at line 86 of file TMarBody.h.

References fE.

6.17.2.16 void TMarBody::SetPt (const Float_t & *Pt*) [inline]

Definition at line 87 of file TMarBody.h.

References fPt.

6.17.2.17 void TMarBody::SetEta (const Float_t & *Eta*) [inline]

Definition at line 88 of file TMarBody.h.

References fEta.

6.17.2.18 void TMarBody::SetPhi (const Float_t & *Phi*) [inline]

Definition at line 89 of file TMarBody.h.

References fPhi.

6.17.2.19 Bool_t TMarBody::IsSel (void)

Definition at line 194 of file TMarBody.C.

References fSelected.

Referenced by TMarBody().

6.17.2.20 void TMarBody::SetEPtEtaPhi (Float_t *E*, Float_t *Pt*, Float_t *Eta*, Float_t *Phi*)

Definition at line 115 of file TMarBody.C.

References fE, fEta, fPhi, and fPt.

Referenced by TMarEvent::AddParticleToList().

6.17.2.21 void TMarBody::SetSel (Bool_t *selection*)

Definition at line 186 of file TMarBody.C.

References fSelected.

6.17.2.22 Int_t TMarBody::Compare (const TObject * *body*) [virtual]

Definition at line 202 of file TMarBody.C.

References GetPt().

6.17.2.23 Bool_t TMarBody::IsEqual (const TMarBody * *body*)

Definition at line 219 of file TMarBody.C.

References fEta, fPhi, fPt, GetEta(), GetPhi(), and GetPt().

6.17.2.24 Bool_t TMarBody::IsSortable () const [virtual]

Definition at line 243 of file TMarBody.C.

6.17.2.25 bool TMarBody::operator< (const TMarBody & *other*)

Definition at line 269 of file TMarBody.C.

References fPt.

6.17.2.26 Float_t TMarBody::EtaPhiDist (TMarBody * *body*)

Definition at line 250 of file TMarBody.C.

References GetEta(), and GetPhi().

6.17.3 Member Data Documentation

6.17.3.1 Int_t TMarBody::fIndex [private]

Definition at line 112 of file TMarBody.h.

Referenced by ClassImp(), GetIndex(), and TMarBody().

6.17.3.2 Int_t TMarBody::fIndexID [private]

Definition at line 113 of file TMarBody.h.

Referenced by ClassImp(), GetIndexID(), and TMarBody().

6.17.3.3 Int_t TMarBody::fID [private]

Definition at line 114 of file TMarBody.h.

Referenced by GetType(), and TMarBody().

6.17.3.4 Float_t TMarBody::fE [private]

Definition at line 115 of file TMarBody.h.

Referenced by ClassImp(), GetE(), GetEPtEtaPhi(), GetFourVector(), GetP(), SetE(), SetEPtEtaPhi(), and TMarBody().

6.17.3.5 Float_t TMarBody::fPt [private]

Definition at line 116 of file TMarBody.h.

Referenced by ClassImp(), GetEPtEtaPhi(), GetFourVector(), IsEqual(), operator<(), SetEPtEtaPhi(), SetPt(), and TMarBody().

6.17.3.6 Float_t TMarBody::fEta [private]

Definition at line 117 of file TMarBody.h.

Referenced by ClassImp(), GetEPtEtaPhi(), GetEta(), GetFourVector(), GetTheta(), IsEqual(), SetEPtEtaPhi(), SetEta(), and TMarBody().

6.17.3.7 Float_t TMarBody::fPhi [private]

Definition at line 118 of file TMarBody.h.

Referenced by ClassImp(), GetEPtEtaPhi(), GetFourVector(), GetPhi(), IsEqual(), SetEPtEtaPhi(), SetPhi(), and TMarBody().

6.17.3.8 Bool_t TMarBody::fSelected [private]

Definition at line 119 of file TMarBody.h.

Referenced by ClassImp(), IsSel(), SetSel(), and TMarBody().

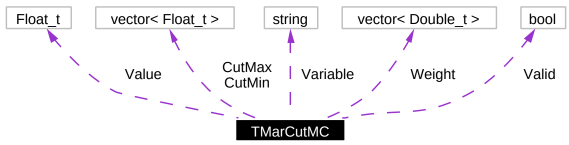
The documentation for this class was generated from the following files:

- **TMarBody.h**
- **TMarBody.C**

6.18 TMarCutMC Class Reference

`#include <TMarCutMC.h>`

Collaboration diagram for TMarCutMC:



Public Member Functions

- **TMarCutMC** ()
- string **GetVariable** () const
- Float_t **GetValue** () const
- vector< Float_t > **GetCutMin** () const
- vector< Float_t > **GetCutMax** () const
- vector< Double_t > **GetWeight** () const
- bool **GetValid** () const
- Double_t **Evaluate** (Double_t value)

Private Attributes

- bool **Valid**
- string **Variable**
- vector< Float_t > **CutMin**
- vector< Float_t > **CutMax**
- vector< Double_t > **Weight**
- Float_t **Value**

Friends

- istream & **operator>>** (istream &in, **TMarCutMC** &CutMC)
- ostream & **operator<<** (ostream &out, **TMarCutMC** &CutMC)

6.18.1 Constructor & Destructor Documentation

6.18.1.1 TMarCutMC::TMarCutMC ()

Definition at line 13 of file TMarCutMC.C.

References Valid, and Variable.

6.18.2 Member Function Documentation

6.18.2.1 string TMarCutMC::GetVariable () const [inline]

Definition at line 36 of file TMarCutMC.h.

References Variable.

Referenced by TMarEvent::MCGenSelection().

6.18.2.2 Float_t TMarCutMC::GetValue () const [inline]

Definition at line 37 of file TMarCutMC.h.

References Value.

6.18.2.3 vector<Float_t> TMarCutMC::GetCutMin () const [inline]

Definition at line 39 of file TMarCutMC.h.

References CutMin.

6.18.2.4 vector<Float_t> TMarCutMC::GetCutMax () const [inline]

Definition at line 40 of file TMarCutMC.h.

References CutMax.

6.18.2.5 vector<Double_t> TMarCutMC::GetWeight () const [inline]

Definition at line 41 of file TMarCutMC.h.

References Weight.

6.18.2.6 bool TMarCutMC::GetValid () const [inline]

Definition at line 43 of file TMarCutMC.h.

References Valid.

6.18.2.7 Double_t TMarCutMC::Evaluate (Double_t *value*)

Definition at line 118 of file TMarCutMC.C.

References CutMax, CutMin, and Weight.

Referenced by TMarEvent::MCGenSelection().

6.18.3 Friends And Related Function Documentation

6.18.3.1 istream& operator>> (istream & *in*, TMarCutMC & *CutMC*) [friend]

Definition at line 20 of file TMarCutMC.C.

6.18.3.2 ostream& operator<< (ostream & *out*, TMarCutMC & *CutMC*) [friend]

Definition at line 76 of file TMarCutMC.C.

6.18.4 Member Data Documentation

6.18.4.1 bool TMarCutMC::Valid [private]

Definition at line 27 of file TMarCutMC.h.

Referenced by GetValid(), and TMarCutMC().

6.18.4.2 string TMarCutMC::Variable [private]

Definition at line 28 of file TMarCutMC.h.

Referenced by GetVariable(), operator<<(), operator>>(), and TMarCutMC().

6.18.4.3 vector<Float_t> TMarCutMC::CutMin [private]

Definition at line 29 of file TMarCutMC.h.

Referenced by Evaluate(), GetCutMin(), operator<<(), and operator>>().

6.18.4.4 vector<Float_t> TMarCutMC::CutMax [private]

Definition at line 30 of file TMarCutMC.h.

Referenced by Evaluate(), GetCutMax(), operator<<(), and operator>>().

6.18.4.5 vector<Double_t> TMarCutMC::Weight [private]

Definition at line 31 of file TMarCutMC.h.

Referenced by Evaluate(), GetWeight(), operator<<(), and operator>>().

6.18.4.6 Float_t TMarCutMC::Value [private]

Definition at line 32 of file TMarCutMC.h.

Referenced by GetValue().

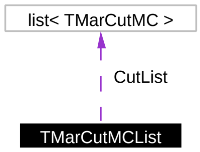
The documentation for this class was generated from the following files:

- **TMarCutMC.h**
- **TMarCutMC.C**

6.19 TMarCutMCList Class Reference

`#include <TMarCutMC.h>`

Collaboration diagram for TMarCutMCList:



Public Attributes

- list< **TMarCutMC** > **CutList**

Friends

- istream & **operator>>** (istream &in, **TMarCutMCList** &CutMCList)
- ostream & **operator<<** (ostream &out, **TMarCutMCList** &CutMCList)

6.19.1 Friends And Related Function Documentation

6.19.1.1 istream& operator>> (istream & *in*, TMarCutMCList & *CutMCList*) `[friend]`

Definition at line 134 of file TMarCutMC.C.

6.19.1.2 ostream& operator<< (ostream & *out*, TMarCutMCList & *CutMCList*) `[friend]`

Definition at line 156 of file TMarCutMC.C.

6.19.2 Member Data Documentation

6.19.2.1 list<TMarCutMC> TMarCutMCList::CutList

Definition at line 61 of file TMarCutMC.h.

Referenced by TMarEvent::MCGenSelection(), operator<<(), and operator>>().

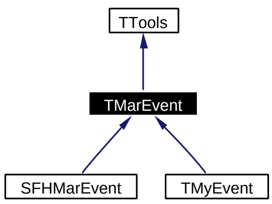
The documentation for this class was generated from the following file:

- **TMarCutMC.h**

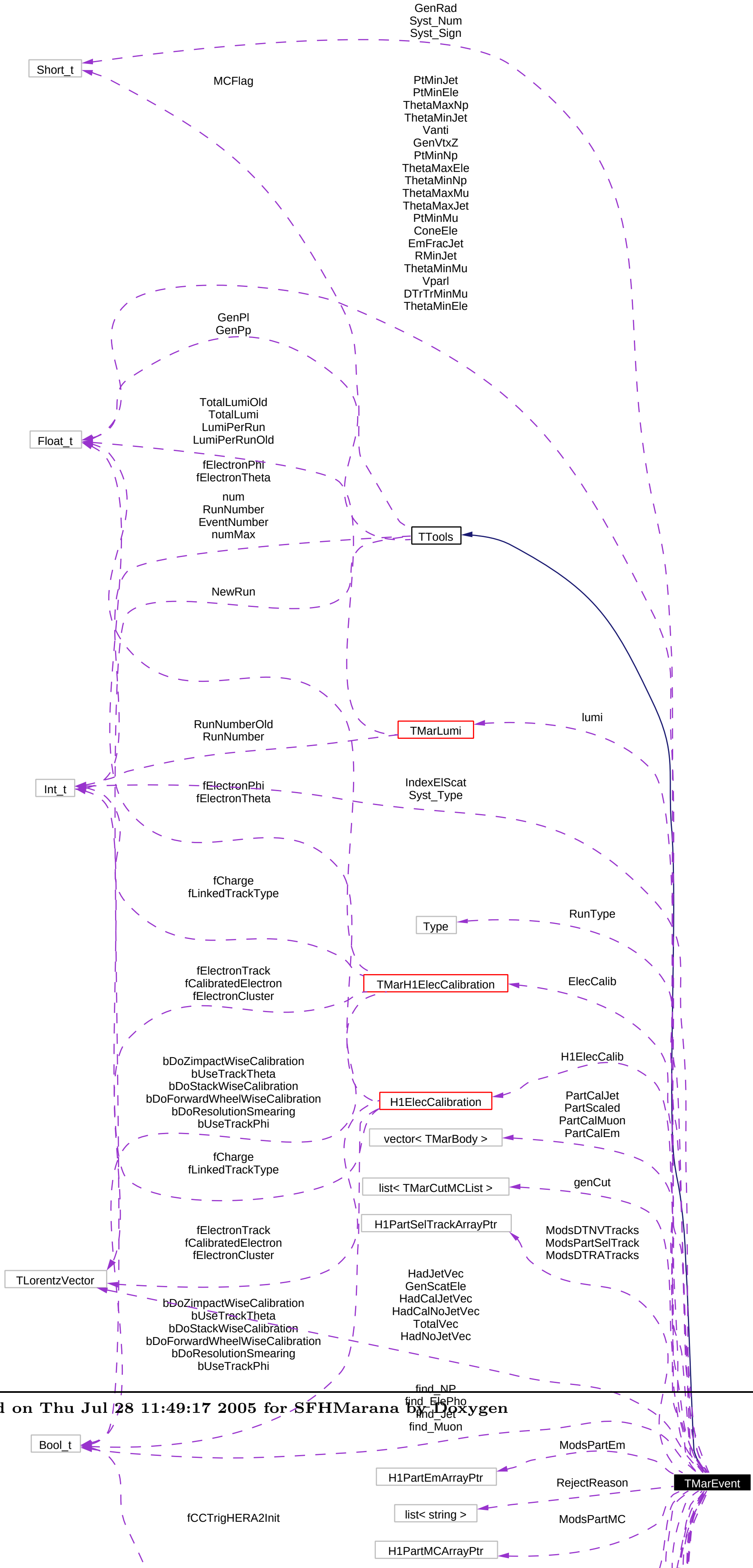
6.20 TMarEvent Class Reference

`#include <TMarEvent.h>`

Inheritance diagram for TMarEvent:



Collaboration diagram for TMarEvent:


GenRad
Syst_Num
Syst_Sign
Short_t
MCFlag
PtMinJet
PtMinEle
ThetaMaxNp
ThetaMinJet
Vanti
GenVtxZ
PtMinNp
ThetaMaxEle
ThetaMinNp
ThetaMaxMu
ThetaMaxJet
PtMinMu
ConeEle
EmFracJet
RMinJet
ThetaMinMu
Vparl
DTrTrMinMu
ThetaMinEle
GenPl
GenPp
TotalLumiOld
TotalLumi
LumiPerRun
LumiPerRunOld
Float_t
fElectronPhi
fElectronTheta
num
RunNumber
EventNumber
numMax
TTools
NewRun
TMarLumi
lumi
RunNumberOld
RunNumber
Int_t
fElectronPhi
fElectronTheta
IndexElScat
Syst_Type
fCharge
fLinkedTrackType
Type
RunType
TMarH1ElecCalibration
ElecCalib
fElectronTrack
fCalibratedElectron
fElectronCluster
bDoZimpactWiseCalibration
bUseTrackTheta
bDoStackWiseCalibration
bDoForwardWheelWiseCalibration
bDoResolutionSmearing
bUseTrackPhi
H1ElecCalibration
H1ElecCalib
vector< TMarBody >
PartCalJet
PartScaled
PartCalMuon
PartCalEm
fCharge
fLinkedTrackType
list< TMarCutMCList >
genCut
H1PartSelTrackArrayPtr
ModsDTNVTracks
ModsPartSelTrack
ModsDTRATracks
fElectronTrack
fCalibratedElectron
fElectronCluster
TLorentzVector
HadJetVec
GenScatEle
HadCalJetVec
HadCalNoJetVec
TotalVec
HadNoJetVec
bDoZimpactWiseCalibration
bUseTrackTheta
bDoStackWiseCalibration
bDoForwardWheelWiseCalibration
bDoResolutionSmearing
bUseTrackPhi
find_NP
find_ElePho
find_Jet
find_Muon
Bool_t
ModsPartEm
H1PartEmArrayPtr
RejectReason
TMarEvent
list< string >
fCCTrigHERA2Init
ModsPartMC
H1PartMCArrayPtr

Public Types

- enum **Type** {
  Data = 0, **NC_Djo**, **NC_Rap**, **CC_Djo**,
  EE_Grape, **MM_Grape**, **TT_Grape**, **EG_Wabgen**,
  GP_Pythia, **W_Epvec**, **QCD_Ins**, **Htm**,
  Anotop, **PsCC**, **POUDS**, **RAPD_UDS**,
  UNKNOWN }
- enum **Year** {
  Y9497 = 3, **Y9899** = 4, **Y9900** = 5, **Y0203** = 6,
  Y0304 = 7, **Y05** = 8 }

Public Member Functions

- virtual void **Clear** (void)
- virtual void **ClearSelectedParticles** (void)
- virtual void **DefineInputParticles** ()
- virtual void **ApplySystematicShifts** (**TMarSyst** &)
- virtual void **CalculateDerivedVariables** ()
- virtual Bool_t **FillFromMods** ()
- virtual Bool_t **FillFromHat** ()
- virtual Bool_t **FillGeneratedParticlesAndCut** ()
- virtual Bool_t **MCGenSelection** (**TMarCutMCList** &List)
- virtual Bool_t **Init** ()
- virtual Bool_t **Next** (**TRunHisto** &run)
- virtual Int_t **FindElePho** ()
- virtual Int_t **FindMuon** ()
- virtual Int_t **FindNP** ()
- virtual Int_t **FindJet** ()
- virtual void **FindGeneratedParticles** ()
- virtual void **ApplyHfsCalibration** ()
- virtual void **ApplyLowQ2HfsCalibration** ()
- virtual void **SelectParticles** ()
- void **GetPthEhTracksClusters** (double &, double &, double &, double &)
- virtual void **PrintEventInfo** ()
- Float_t **MinDisttoJets** (Float_t Theta, Float_t Phi)
- Float_t **MinDisttoTracks** (Float_t Theta, Float_t Phi)
- Float_t **CalcDistTracks** (H1PartSelTrackArrayPtr Tracks, const H1PartEm *EMParticle)
- Float_t **CalcDistDTNV** (const H1PartEm *EMParticle)
- void **CalcDCA** (TVector3 ClusStart, TVector3 TrackEnd, Float_t Theta, Float_t Phi, Float_t &Dca, Float_t &Alpha, Float_t &Dlon) const
- virtual Float_t **ApplyCCBackgroundCuts** ()
- virtual Float_t **CCTriggerEfficiency** ()
- virtual Float_t **JJTriggerEfficiency** ()
- virtual Float_t **MuTriggerEfficiency** ()
- virtual Float_t **CCAndLeptonTriggerEfficiency** ()
- virtual void **ApplyTriggerEfficiencies** ()
- virtual void **ApplyMCXSectionReweight** ()

- Int_t **AddParticleToList** (TClonesArray *List, Int_t IndexCand, Int_t ID, Float_t E, Float_t Pt, Float_t Eta, Float_t Phi)
- Int_t **AddParticleToList** (TClonesArray *List, **TMarBody** *body)
- void **SortPt** (TClonesArray *list)
- **TMarEvent** (const **TRun** *run)
- virtual ~**TMarEvent** ()

Public Attributes

- Bool_t **find_ElePho**
- Bool_t **find_Muon**
- Bool_t **find_Jet**
- Bool_t **find_NP**
- H1PartCandArrayPtr **ModsPartCand**
- H1PartEmArrayPtr **ModsPartEm**
- H1PartMuonArrayPtr **ModsPartMuon**
- H1ExclHfsIterator **ModsPartHFS**
- H1PartJetArrayPtr **ModsPartJet**
- H1PartSelTrackArrayPtr **ModsPartSelTrack**
- H1PartMCArrayPtr **ModsPartMC**
- H1PartJetArrayPtr **ModsGenKtJets**
- H1PartSelTrackArrayPtr **ModsDTRATracks**
- H1PartSelTrackArrayPtr **ModsDTNVTracks**
- vector< **TMarBody** > **PartCalEm**
- vector< **TMarBody** > **PartCalMuon**
- vector< **TMarBody** > **PartCalJet**
- TLorentzVector **HadCalJetVec**
- TLorentzVector **HadCalNoJetVec**
- vector< **TMarBody** > **PartScaled** [3]
- vector< **TMarBody** > * **PartEm**
- vector< **TMarBody** > * **PartMuon**
- vector< **TMarBody** > * **PartJet**
- TLorentzVector **HadNoJetVec**
- TLorentzVector **HadJetVec**
- TLorentzVector **TotalVec**
- TClonesArray * **electron**
- TClonesArray * **photon**
- TClonesArray * **muon**
- TClonesArray * **jet**
- TClonesArray * **np**
- TClonesArray * **GenElectron**
- TClonesArray * **GenPhoton**
- TClonesArray * **GenMuon**
- TClonesArray * **GenTau**
- TClonesArray * **GenNp**
- TClonesArray * **GenHfs**
- TLorentzVector **GenScatEle**
- Float_t **GenVtxZ**
- Double_t **yhgen**
- Short_t **GenRad**

- list< **TMarCutMCList** > **genCut**
- Int_t **Syst_Type**
- Short_t **Syst_Num**
- Short_t **Syst_Sign**
- H1JetCalibration ∗ **JetCalib**
- H1HfsCalibEmHad ∗ **HfsCalib**
- **TMarH1ElecCalibration** ∗ **ElecCalib**
- **H1ElecCalibration** ∗ **H1ElecCalib**
- enum **TMarEvent::Type** **RunType**
- enum **TMarEvent::Year** **RunYear**
- **TMarLumi** ∗ **lumi**
- Double_t **polar**
- Double_t **Vertex** [3]
- Double_t **Epz**
- Double_t **Ptmiss**
- Double_t **Et**
- Int_t **IndexElScat**
- Double_t **Pte**
- Double_t **Ee**
- Double_t **Pze**
- Double_t **The**
- Double_t **Phe**
- Double_t **Q2e**
- Double_t **ye**
- Double_t **xe**
- Double_t **EtotCalo**
- Double_t **Pth**
- Double_t **Thh**
- Double_t **Phh**
- Double_t **Eh**
- Double_t **Pzh**
- Double_t **Q2h**
- Double_t **yh**
- Double_t **xh**
- Double_t **Gammah**
- Double_t **ptIronfrac**
- Double_t **EIronfrac**
- Double_t **ptSpacalfrac**
- Double_t **ESpacalfrac**
- Double_t **Ptda**
- Double_t **Q2da**
- Double_t **yda**
- Double_t **xda**
- Double_t **Eda**
- Double_t **Pts**
- Double_t **Q2s**
- Double_t **ys**
- Double_t **xs**
- Double_t **Q2es**
- Double_t **xes**

- Double_t **yes**
- Double_t **tCJC**
- Double_t **tLAr**
- Double_t **MCWeight**
- Double_t **LumiWeight**
- Double_t **fTriggerWeight**
- Double_t **fQCDWeight**
- Float_t **Vparl**
- Float_t **Vanti**
- Byte_t **Il1ac** [128]
- Byte_t **Il1rw** [128]
- Byte_t **Il1te** [192]
- Float_t **PtMinEle**
- Float_t **ThetaMinEle**
- Float_t **ThetaMaxEle**
- Float_t **ConeEle**
- Float_t **PtMinMu**
- Float_t **ThetaMinMu**
- Float_t **ThetaMaxMu**
- Float_t **DTrTrMinMu**
- Float_t **PtMinJet**
- Float_t **ThetaMinJet**
- Float_t **ThetaMaxJet**
- Float_t **RMinJet**
- Float_t **EmFracJet**
- Float_t **PtMinNp**
- Float_t **ThetaMinNp**
- Float_t **ThetaMaxNp**
- list< string > **RejectReason**
- **TTriggerReweight** ∗ **fTrigReweight**
- **TMCXSectionReweight** ∗ **fMCReweight**

6.20.1 Member Enumeration Documentation

6.20.1.1 enum TMarEvent::Type

Enumeration values:

Data

NC_Djo

NC_Rap

CC_Djo

EE_Grape

MM_Grape

TT_Grape

EG_Wabgen

GP_Pythia

W_Epvec

QCD_Ins

Htm

Anotop

PsCC

POUDS

RAPD_UDS

UNKNOWN

Definition at line 171 of file TMarEvent.h.

6.20.1.2 enum TMarEvent::Year

Enumeration values:

Y9497

Y9899

Y9900

Y0203

Y0304

Y05

Definition at line 173 of file TMarEvent.h.

6.20.2 Constructor & Destructor Documentation

6.20.2.1 TMarEvent::TMarEvent (const TRun ∗ *run*)

Definition at line 23 of file TMarEvent.C.

References Anotop, CC_Djo, Clear(), ConeEle, Data, DTrTrMinMu, EE_Grape, EG_Wabgen, TRun::ElCalib, ElecCalib, electron, EmFracJet, find_ElePho, find_Jet, find_Muon, find_NP, f-MCReweight, fQCDWeight, fTrigReweight, TRun::genCut, genCut, GenElectron, GenHfs, Gen-Muon, GenNp, GenPhoton, GenTau, GP_Pythia, H1ElecCalib, HfsCalib, TRun::HfsCalib, Htm, jet, JetCalib, TRun::Lumi, lumi, TRun::lumi_file, TRun::lumi_file_bad_runs, LumiWeight, MM_-Grape, ModsDTNVTracks, ModsDTRATracks, ModsGenKtJets, ModsPartCand, ModsPart-Em, ModsPartJet, ModsPartMC, ModsPartMuon, ModsPartSelTrack, muon, NC_Djo, NC_Rap, TRun::nMaxEvt, np, TTools::numMax, photon, POUDS, PsCC, PtMinEle, PtMinJet, PtMin-Mu, PtMinNp, QCD_Ins, RAPD_UDS, RMinJet, RunType, RunYear, ThetaMaxEle, ThetaMax-Jet, ThetaMaxMu, ThetaMaxNp, ThetaMinEle, ThetaMinJet, ThetaMinMu, ThetaMinNp, TT_-Grape, TRun::Type, UNKNOWN, W_Epvec, Y0203, Y0304, Y05, Y9497, Y9899, Y9900, and TRun::Year.

6.20.2.2 TMarEvent::∼TMarEvent () `[virtual]`

Definition at line 198 of file TMarEvent.C.

References electron, fMCReweight, fTrigReweight, GenElectron, GenHfs, GenMuon, GenNp, Gen-Photon, GenTau, jet, lumi, muon, np, PartCalEm, PartCalJet, PartCalMuon, PartScaled, and photon.

6.20.3 Member Function Documentation

6.20.3.1 void TMarEvent::Clear (void) [virtual]

Reimplemented in **TMyEvent** (p. 134).

Definition at line 1971 of file TMarEvent.C.

References Ee, Eh, electron, Epz, Et, GenElectron, GenHfs, GenMuon, GenNp, GenPhoton, GenScatEle, GenTau, HadCalJetVec, HadCalNoJetVec, HadJetVec, HadNoJetVec, IndexElScat, jet, MCWeight, muon, np, PartCalEm, PartCalJet, PartCalMuon, PartEm, PartJet, PartMuon, Phe, Phh, photon, polar, Ptda, Pte, Pth, Ptmiss, Pze, Pzh, Q2da, Q2e, Q2es, Q2h, RejectReason, Syst_Sign, Syst_Type, tCJC, The, Thh, tLAr, TotalVec, Vanti, Vertex, Vparl, xda, xe, xes, xh, yda, ye, yes, and yh.

Referenced by TMyEvent::Clear(), Init(), and TMarEvent().

6.20.3.2 void TMarEvent::ClearSelectedParticles (void) [virtual]

Definition at line 1954 of file TMarEvent.C.

References electron, jet, muon, np, and photon.

Referenced by Next().

6.20.3.3 void TMarEvent::DefineInputParticles () [virtual]

Definition at line 1738 of file TMarEvent.C.

References ApplyHfsCalibration(), ApplyLowQ2HfsCalibration(), ElecCalib, H1ElecCalibration::GetElecCalibration(), TMarH1ElecCalibration::GetElecCalibration(), H1ElecCalib, HadCalJetVec, HadCalNoJetVec, HfsCalib, IDELE, IDJET, IDMU, JetCalib, TTools::MCFlag, ModsPartEm, ModsPartHFS, ModsPartJet, ModsPartMuon, PartCalEm, PartCalJet, PartCalMuon, RunYear, and Vertex.

Referenced by Init().

6.20.3.4 void TMarEvent::ApplySystematicShifts (TMarSyst &) [virtual]

Definition at line 1594 of file TMarEvent.C.

References HadCalJetVec, HadCalNoJetVec, HadJetVec, HadNoJetVec, PartCalEm, PartCalJet, PartCalMuon, PartEm, PartJet, PartMuon, PartScaled, RunYear, TMarSyst::ScaleEnergyPartEm(), TMarSyst::ScaleEnergyPartJet(), TMarSyst::ScaleNoiseHFS(), TMarSyst::ScalePtPartMuon(), TMarSyst::ScaleThetaPartEm(), TMarSyst::ScaleThetaPartJet(), TMarSyst::ScaleThetaPartMuon(), Syst_Num, Syst_Type, TMAREVENTDEBUG, and Vertex.

Referenced by Next().

6.20.3.5 void TMarEvent::CalculateDerivedVariables () [virtual]

Definition at line 284 of file TMarEvent.C.

References Eda, Ee, Eh, Epz, Gammah, TTools::GenPl, TTools::GenPp, HadJetVec, HadNoJetVec, IndexElScat, ModsPartEm, ModsPartMuon, PartEm, PartMuon, Phe, Phh, Ptda, Pte, Pth, Ptmiss, Pze, Pzh, Q2da, Q2e, Q2es, Q2h, Q2s, The, Thh, TMAREVENTDEBUG, TotalVec, xda, xe, xes, xh, xs, yda, ye, yes, yh, and ys.

Referenced by Next().

6.20.3.6 virtual Bool_t TMarEvent::FillFromMods () `[inline, virtual]`

Reimplemented in **TMyEvent** (p. 134).

Definition at line 305 of file TMarEvent.h.

Referenced by TMyEvent::FillFromMods().

6.20.3.7 Bool_t TMarEvent::FillFromHat () `[virtual]`

Reimplemented in **TMyEvent** (p. 134).

Definition at line 384 of file TMarEvent.C.

References ApplyMCXSectionReweight(), Ee, EIronfrac, Epz, ESpacalfrac, Et, EtotCalo, TTools::GenPl, TTools::GenPp, GenRad, GenVtxZ, Il1ac, Il1rw, Il1te, LumiWeight, TTools::MCFlag, MCWeight, ptIronfrac, Ptmiss, Pts, ptSpacalfrac, Q2da, Q2e, Q2es, Q2h, Q2s, tCJC, The, tLAr, Vanti, Vertex, Vparl, xes, xs, yda, ye, yes, yh, yhgen, and ys.

Referenced by TMyEvent::FillFromHat(), and Init().

6.20.3.8 Bool_t TMarEvent::FillGeneratedParticlesAndCut () `[virtual]`

Definition at line 660 of file TMarEvent.C.

References FindGeneratedParticles(), genCut, LumiWeight, TTools::MCFlag, MCGenSelection(), and TMAREVENTDEBUG.

Referenced by Init().

6.20.3.9 Bool_t TMarEvent::MCGenSelection (TMarCutMCList & *List*) `[virtual]`

Definition at line 555 of file TMarEvent.C.

References TMarCutMCList::CutList, TMarCutMC::Evaluate(), GenElectron, GenMuon, GenPhoton, TTools::GenPl, TTools::GenPp, GenScatEle, TMarBody::GetE(), TMarBody::GetPx(), TMarBody::GetPy(), TMarBody::GetPz(), TMarCutMC::GetVariable(), LumiWeight, ModsPartMC, and TTools::num.

Referenced by FillGeneratedParticlesAndCut().

6.20.3.10 Bool_t TMarEvent::Init () `[virtual]`

Definition at line 1490 of file TMarEvent.C.

References Clear(), Data, DefineInputParticles(), TMarLumi::detStatus, TTools::EventNumber, FillFromHat(), FillGeneratedParticlesAndCut(), lumi, TTools::MCFlag, TTools::NewRun, TTools::num, TTools::numMax, TTools::RunNumber, RunType, and TMarLumi::Update().

Referenced by Next().

6.20.3.11 Bool_t TMarEvent::Next (TRunHisto & *run*) [virtual]

Definition at line 1439 of file TMarEvent.C.

References ApplySystematicShifts(), ApplyTriggerEfficiencies(), CalculateDerivedVariables(), ClearSelectedParticles(), Init(), TMarSyst::Name, TMarSyst::Next(), TRunHisto::output_file_root, SelectParticles(), TMarSyst::Sign, TRunHisto::Syst, Syst_Sign, Syst_Type, and TMarSyst::Type.

Referenced by main().

6.20.3.12 Int_t TMarEvent::FindElePho () [virtual]

Reimplemented in **TMyEvent** (p. 134).

Definition at line 697 of file TMarEvent.C.

References AddParticleToList(), ConeEle, electron, TTools::GetRealPhi(), IDELE, IDPHO, ModsPartEm, ModsPartSelTrack, MYR2D, PartEm, photon, PtMinEle, ThetaMaxEle, and ThetaMinEle.

Referenced by SelectParticles().

6.20.3.13 Int_t TMarEvent::FindMuon () [virtual]

Reimplemented in **TMyEvent** (p. 134).

Definition at line 865 of file TMarEvent.C.

References AddParticleToList(), DTrTrMinMu, IDMU, ModsPartMuon, muon, MYR2D, PartMuon, PtMinMu, ThetaMaxMu, and ThetaMinMu.

Referenced by SelectParticles().

6.20.3.14 Int_t TMarEvent::FindNP () [virtual]

Reimplemented in **TMyEvent** (p. 134).

Definition at line 915 of file TMarEvent.C.

References AddParticleToList(), Epz, IDNP, INDEXNP, MYR2D, np, PtMinNp, Ptmiss, ThetaMaxNp, ThetaMinNp, and TotalVec.

Referenced by SelectParticles().

6.20.3.15 Int_t TMarEvent::FindJet () [virtual]

Reimplemented in **TMyEvent** (p. 135).

Definition at line 945 of file TMarEvent.C.

References AddParticleToList(), EmFracJet, TMarBody::GetE(), TMarBody::GetIndexID(), TMarBody::GetPhi(), TMarBody::GetPt(), TTools::GetRealPhi(), TMarBody::GetTheta(), IDJET, jet, ModsPartJet, MYR2D, PartJet, PtMinJet, RMinJet, ThetaMaxJet, and ThetaMinJet.

Referenced by SelectParticles().

6.20.3.16 void TMarEvent::FindGeneratedParticles () `[virtual]`

Definition at line 1290 of file TMarEvent.C.

References AddParticleToList(), GenElectron, GenHfs, GenMuon, GenPhoton, GenScatEle, GenTau, IDGELE, IDGMU, IDGTAU, ModsPartMC, and TMAREVENTDEBUG.

Referenced by FillGeneratedParticlesAndCut().

6.20.3.17 void TMarEvent::ApplyHfsCalibration () `[virtual]`

Definition at line 1886 of file TMarEvent.C.

References HadCalJetVec, HadCalNoJetVec, IDJET, jet, JetCalib, ModsPartJet, and PartCalJet.

Referenced by DefineInputParticles().

6.20.3.18 void TMarEvent::ApplyLowQ2HfsCalibration () `[virtual]`

Definition at line 1913 of file TMarEvent.C.

References HadCalJetVec, HadCalNoJetVec, HfsCalib, IDJET, jet, and PartCalJet.

Referenced by DefineInputParticles().

6.20.3.19 void TMarEvent::SelectParticles () `[virtual]`

Reimplemented in **TMyEvent** (p. 135).

Definition at line 266 of file TMarEvent.C.

References find_ElePho, find_Jet, find_Muon, find_NP, FindElePho(), FindJet(), FindMuon(), and FindNP().

Referenced by Next().

6.20.3.20 void TMarEvent::GetPthEhTracksClusters (double &, double &, double &, double &)

Definition at line 1936 of file TMarEvent.C.

References ModsPartHFS.

6.20.3.21 void TMarEvent::PrintEventInfo () `[virtual]`

Definition at line 2378 of file TMarEvent.C.

References electron, Epz, TTools::EventNumber, Gammah, TMarBody::GetE(), TMarBody::GetPhi(), TMarBody::GetPt(), TMarBody::GetTheta(), jet, muon, MYR2D, np, photon, Pth, Ptmiss, RejectReason, and TTools::RunNumber.

6.20.3.22 Float_t TMarEvent::MinDisttoJets (Float_t *Theta*, Float_t *Phi*)

Definition at line 1028 of file TMarEvent.C.

References ModsPartJet.

6.20.3.23 Float_t TMarEvent::MinDisttoTracks (Float_t *Theta*, Float_t *Phi*)

Definition at line 1064 of file TMarEvent.C.

References ModsPartSelTrack.

6.20.3.24 Float_t TMarEvent::CalcDistTracks (H1PartSelTrackArrayPtr *Tracks*, const H1PartEm * *EMParticle*)

Definition at line 1169 of file TMarEvent.C.

References CalcDCA(), TTools::CalcExtraPolTrack(), and Vertex.

6.20.3.25 Float_t TMarEvent::CalcDistDTNV (const H1PartEm * *EMParticle*)

Definition at line 1100 of file TMarEvent.C.

References CalcDCA(), TTools::CalcExtraPolTrack(), ModsDTNVTracks, and Vertex.

6.20.3.26 void TMarEvent::CalcDCA (TVector3 *ClusStart*, TVector3 *TrackEnd*, Float_t *Theta*, Float_t *Phi*, Float_t & *Dca*, Float_t & *Alpha*, Float_t & *Dlon*) const

Definition at line 1238 of file TMarEvent.C.

Referenced by CalcDistDTNV(), and CalcDistTracks().

6.20.3.27 Float_t TMarEvent::ApplyCCBackgroundCuts () `[virtual]`

Definition at line 2059 of file TMarEvent.C.

References Gammah, TTools::IsTimingOk(), TTools::MCFlag, ModsPartSelTrack, MYR2D, Q2h, and xh.

6.20.3.28 Float_t TMarEvent::CCTriggerEfficiency () `[virtual]`

Definition at line 2190 of file TMarEvent.C.

References TTriggerReweight::ApplyCCTRIGGEFFreweightHERA2(), TTrigger-Reweight::CCTriggerEff(), fTrigReweight, TTools::IsData1998(), TTools::IsData1999e(), TTools::IsData1999p(), TTools::IsData2000(), TTools::IsDataHeraII(), TTools::IsL1Trigg(), TTools::IsL4Trigg(), TTools::MCFlag, Pth, Q2h, RejectReason, RunYear, Thh, xh, Y0304, and Y05.

Referenced by CCAndLeptonTriggerEfficiency().

6.20.3.29 Float_t TMarEvent::JJTriggerEfficiency () `[virtual]`

Definition at line 2263 of file TMarEvent.C.

References TTriggerReweight::DiJetsTriggerEff(), fTrigReweight, TMarBody::GetIndexID(), TTools::IsDataHeraII(), TTools::IsL4Trigg(), jet, TTools::MCFlag, ModsPartJet, RejectReason, and RunYear.

6.20.3.30 Float_t TMarEvent::MuTriggerEfficiency () [virtual]

Definition at line 2290 of file TMarEvent.C.

References TTools::IsDataHeraII(), TTools::IsL1Trigg(), TTools::MCFlag, RunYear, Y0304, and Y05.

Referenced by CCAndLeptonTriggerEfficiency().

6.20.3.31 Float_t TMarEvent::CCAndLeptonTriggerEfficiency () [virtual]

Definition at line 2239 of file TMarEvent.C.

References CCTriggerEfficiency(), ModsPartEm, ModsPartMuon, MuTriggerEfficiency(), and Ptmiss.

6.20.3.32 void TMarEvent::ApplyTriggerEfficiencies () [virtual]

Definition at line 2308 of file TMarEvent.C.

References fTriggerWeight, MCWeight, and Syst_Type.

Referenced by Next().

6.20.3.33 void TMarEvent::ApplyMCXSectionReweight () [virtual]

Definition at line 2330 of file TMarEvent.C.

References CC_Djo, TTools::GenPl, TTools::GenPp, TMarLumi::GetPolar(), lumi, MCWeight, NC_Djo, polar, RunType, RunYear, Syst_Type, Y0304, and Y05.

Referenced by FillFromHat().

6.20.3.34 Int_t TMarEvent::AddParticleToList (TClonesArray * *List*, Int_t *IndexCand*, Int_t *ID*, Float_t *E*, Float_t *Pt*, Float_t *Eta*, Float_t *Phi*)

Definition at line 1401 of file TMarEvent.C.

References TMarBody::SetEPtEtaPhi().

Referenced by FindElePho(), FindGeneratedParticles(), FindJet(), FindMuon(), and FindNP().

6.20.3.35 Int_t TMarEvent::AddParticleToList (TClonesArray * *List*, TMarBody * *body*)

Definition at line 1422 of file TMarEvent.C.

6.20.3.36 void TMarEvent::SortPt (TClonesArray * *list*)

Definition at line 825 of file TMarEvent.C.

6.20.4 Member Data Documentation

6.20.4.1 Bool_t TMarEvent::find_ElePho

Definition at line 93 of file TMarEvent.h.

Referenced by main(), TMyEvent::SelectParticles(), SelectParticles(), and TMarEvent().

6.20.4.2 Bool_t TMarEvent::find_Muon

Definition at line 94 of file TMarEvent.h.

Referenced by main(), TMyEvent::SelectParticles(), SelectParticles(), and TMarEvent().

6.20.4.3 Bool_t TMarEvent::find_Jet

Definition at line 95 of file TMarEvent.h.

Referenced by main(), TMyEvent::SelectParticles(), SelectParticles(), and TMarEvent().

6.20.4.4 Bool_t TMarEvent::find_NP

Definition at line 96 of file TMarEvent.h.

Referenced by main(), TMyEvent::SelectParticles(), SelectParticles(), and TMarEvent().

6.20.4.5 H1PartCandArrayPtr TMarEvent::ModsPartCand

Definition at line 101 of file TMarEvent.h.

Referenced by TMarEvent().

6.20.4.6 H1PartEmArrayPtr TMarEvent::ModsPartEm

Definition at line 102 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), CCAndLeptonTriggerEfficiency(), DefineInputParticles(), FindElePho(), and TMarEvent().

6.20.4.7 H1PartMuonArrayPtr TMarEvent::ModsPartMuon

Definition at line 103 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), CCAndLeptonTriggerEfficiency(), DefineInputParticles(), FindMuon(), and TMarEvent().

6.20.4.8 H1ExclHfsIterator TMarEvent::ModsPartHFS

Definition at line 104 of file TMarEvent.h.

Referenced by DefineInputParticles(), and GetPthEhTracksClusters().

6.20.4.9 H1PartJetArrayPtr TMarEvent::ModsPartJet

Definition at line 105 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), DefineInputParticles(), FindJet(), JJTriggerEfficiency(), MinDisttoJets(), and TMarEvent().

6.20.4.10 H1PartSelTrackArrayPtr TMarEvent::ModsPartSelTrack

Definition at line 106 of file TMarEvent.h.

Referenced by ApplyCCBackgroundCuts(), FindElePho(), MinDisttoTracks(), and TMarEvent().

6.20.4.11 H1PartMCArrayPtr TMarEvent::ModsPartMC

Definition at line 107 of file TMarEvent.h.

Referenced by FindGeneratedParticles(), MCGenSelection(), and TMarEvent().

6.20.4.12 H1PartJetArrayPtr TMarEvent::ModsGenKtJets

Definition at line 110 of file TMarEvent.h.

Referenced by TMarEvent().

6.20.4.13 H1PartSelTrackArrayPtr TMarEvent::ModsDTRATracks

Definition at line 111 of file TMarEvent.h.

Referenced by TMarEvent().

6.20.4.14 H1PartSelTrackArrayPtr TMarEvent::ModsDTNVTracks

Definition at line 112 of file TMarEvent.h.

Referenced by CalcDistDTNV(), and TMarEvent().

6.20.4.15 vector<TMarBody> TMarEvent::PartCalEm

Definition at line 116 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), Clear(), DefineInputParticles(), SFHMarEvent::SFHMarEvent(), and ~TMarEvent().

6.20.4.16 vector<TMarBody> TMarEvent::PartCalMuon

Definition at line 117 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), Clear(), DefineInputParticles(), SFHMarEvent::SFHMarEvent(), and ~TMarEvent().

6.20.4.17 vector<TMarBody> TMarEvent::PartCalJet

Definition at line 118 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), ApplyLowQ2HfsCalibration(), ApplySystematicShifts(), Clear(), DefineInputParticles(), SFHMarEvent::SFHMarEvent(), and ∼TMarEvent().

6.20.4.18 TLorentzVector TMarEvent::HadCalJetVec

Definition at line 119 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), ApplyLowQ2HfsCalibration(), ApplySystematicShifts(), Clear(), and DefineInputParticles().

6.20.4.19 TLorentzVector TMarEvent::HadCalNoJetVec

Definition at line 120 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), ApplyLowQ2HfsCalibration(), ApplySystematicShifts(), Clear(), and DefineInputParticles().

6.20.4.20 vector<TMarBody> TMarEvent::PartScaled[3]

Definition at line 123 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), and ∼TMarEvent().

6.20.4.21 vector<TMarBody>∗ TMarEvent::PartEm

Definition at line 124 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), CalculateDerivedVariables(), Clear(), and FindElePho().

6.20.4.22 vector<TMarBody>∗ TMarEvent::PartMuon

Definition at line 125 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), CalculateDerivedVariables(), Clear(), and FindMuon().

6.20.4.23 vector<TMarBody>∗ TMarEvent::PartJet

Definition at line 126 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), Clear(), and FindJet().

6.20.4.24 TLorentzVector TMarEvent::HadNoJetVec

Definition at line 127 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), CalculateDerivedVariables(), and Clear().

6.20.4.25 TLorentzVector TMarEvent::HadJetVec

Definition at line 128 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), CalculateDerivedVariables(), and Clear().

6.20.4.26 TLorentzVector TMarEvent::TotalVec

Definition at line 129 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FindNP().

6.20.4.27 TClonesArray* TMarEvent::electron

Definition at line 133 of file TMarEvent.h.

Referenced by Clear(), ClearSelectedParticles(), FindElePho(), PrintEventInfo(), TMarEvent(), and ~TMarEvent().

6.20.4.28 TClonesArray* TMarEvent::photon

Definition at line 134 of file TMarEvent.h.

Referenced by Clear(), ClearSelectedParticles(), FindElePho(), PrintEventInfo(), TMarEvent(), and ~TMarEvent().

6.20.4.29 TClonesArray* TMarEvent::muon

Definition at line 135 of file TMarEvent.h.

Referenced by Clear(), ClearSelectedParticles(), FindMuon(), PrintEventInfo(), TMarEvent(), and ~TMarEvent().

6.20.4.30 TClonesArray* TMarEvent::jet

Definition at line 136 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), ApplyLowQ2HfsCalibration(), Clear(), ClearSelectedParticles(), FindJet(), JJTriggerEfficiency(), main(), PrintEventInfo(), TMarEvent(), and ~TMarEvent().

6.20.4.31 TClonesArray* TMarEvent::np

Definition at line 137 of file TMarEvent.h.

Referenced by Clear(), ClearSelectedParticles(), FindNP(), PrintEventInfo(), TMarEvent(), and ~TMarEvent().

6.20.4.32 TClonesArray* TMarEvent::GenElectron

Definition at line 141 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), MCGenSelection(), TMarEvent(), and ~TMarEvent().

6.20.4.33 TClonesArray∗ TMarEvent::GenPhoton

Definition at line 142 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), MCGenSelection(), TMarEvent(), and ∼TMarEvent().

6.20.4.34 TClonesArray∗ TMarEvent::GenMuon

Definition at line 143 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), MCGenSelection(), TMarEvent(), and ∼TMarEvent().

6.20.4.35 TClonesArray∗ TMarEvent::GenTau

Definition at line 144 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), TMarEvent(), and ∼TMarEvent().

6.20.4.36 TClonesArray∗ TMarEvent::GenNp

Definition at line 145 of file TMarEvent.h.

Referenced by Clear(), TMarEvent(), and ∼TMarEvent().

6.20.4.37 TClonesArray∗ TMarEvent::GenHfs

Definition at line 146 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), TMarEvent(), and ∼TMarEvent().

6.20.4.38 TLorentzVector TMarEvent::GenScatEle

Definition at line 147 of file TMarEvent.h.

Referenced by Clear(), FindGeneratedParticles(), and MCGenSelection().

6.20.4.39 Float_t TMarEvent::GenVtxZ

Definition at line 149 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.40 Double_t TMarEvent::yhgen

Definition at line 150 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.41 Short_t TMarEvent::GenRad

Definition at line 151 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.42 list<TMarCutMCList> TMarEvent::genCut

Definition at line 154 of file TMarEvent.h.

Referenced by FillGeneratedParticlesAndCut(), and TMarEvent().

6.20.4.43 Int_t TMarEvent::Syst_Type

Definition at line 157 of file TMarEvent.h.

Referenced by ApplyMCXSectionReweight(), ApplySystematicShifts(), ApplyTrigger-Efficiencies(), Clear(), THisto::Cut(), and Next().

6.20.4.44 Short_t TMarEvent::Syst_Num

Definition at line 158 of file TMarEvent.h.

Referenced by ApplySystematicShifts().

6.20.4.45 Short_t TMarEvent::Syst_Sign

Definition at line 159 of file TMarEvent.h.

Referenced by Clear(), and Next().

6.20.4.46 H1JetCalibration* TMarEvent::JetCalib

Definition at line 162 of file TMarEvent.h.

Referenced by ApplyHfsCalibration(), DefineInputParticles(), and TMarEvent().

6.20.4.47 H1HfsCalibEmHad* TMarEvent::HfsCalib

Definition at line 164 of file TMarEvent.h.

Referenced by ApplyLowQ2HfsCalibration(), DefineInputParticles(), and TMarEvent().

6.20.4.48 TMarH1ElecCalibration* TMarEvent::ElecCalib

Definition at line 166 of file TMarEvent.h.

Referenced by DefineInputParticles(), and TMarEvent().

6.20.4.49 H1ElecCalibration* TMarEvent::H1ElecCalib

Definition at line 167 of file TMarEvent.h.

Referenced by DefineInputParticles(), and TMarEvent().

6.20.4.50 enum TMarEvent::Type TMarEvent::RunType

Referenced by ApplyMCXSectionReweight(), Init(), and TMarEvent().

6.20.4.51 enum TMarEvent::Year TMarEvent::RunYear

Referenced by ApplyMCXSectionReweight(), ApplySystematicShifts(), CCTriggerEfficiency(), DefineInputParticles(), JJTriggerEfficiency(), MuTriggerEfficiency(), and TMarEvent().

6.20.4.52 TMarLumi* TMarEvent::lumi

Definition at line 176 of file TMarEvent.h.

Referenced by ApplyMCXSectionReweight(), THisto::FillLumi(), Init(), TMarEvent(), and ~TMarEvent().

6.20.4.53 Double_t TMarEvent::polar

Definition at line 177 of file TMarEvent.h.

Referenced by ApplyMCXSectionReweight(), and Clear().

6.20.4.54 Double_t TMarEvent::Vertex[3]

Definition at line 180 of file TMarEvent.h.

Referenced by ApplySystematicShifts(), CalcDistDTNV(), CalcDistTracks(), Clear(), THisto::Cut(), DefineInputParticles(), FillFromHat(), and main().

6.20.4.55 Double_t TMarEvent::Epz

Definition at line 181 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), FillFromHat(), FindNP(), and PrintEventInfo().

6.20.4.56 Double_t TMarEvent::Ptmiss

Definition at line 182 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), CCAndLeptonTriggerEfficiency(), Clear(), FillFromHat(), FindNP(), and PrintEventInfo().

6.20.4.57 Double_t TMarEvent::Et

Definition at line 183 of file TMarEvent.h.

Referenced by Clear(), and FillFromHat().

6.20.4.58 Int_t TMarEvent::IndexElScat

Definition at line 187 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.59 Double_t TMarEvent::Pte

Definition at line 188 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.60 Double_t TMarEvent::Ee

Definition at line 189 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.61 Double_t TMarEvent::Pze

Definition at line 190 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.62 Double_t TMarEvent::The

Definition at line 191 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.63 Double_t TMarEvent::Phe

Definition at line 192 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.64 Double_t TMarEvent::Q2e

Definition at line 193 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.65 Double_t TMarEvent::ye

Definition at line 194 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.66 Double_t TMarEvent::xe

Definition at line 195 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.67 Double_t TMarEvent::EtotCalo

Definition at line 199 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.68 Double_t TMarEvent::Pth

Definition at line 201 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), CCTriggerEfficiency(), Clear(), and PrintEventInfo().

6.20.4.69 Double_t TMarEvent::Thh

Definition at line 202 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), CCTriggerEfficiency(), and Clear().

6.20.4.70 Double_t TMarEvent::Phh

Definition at line 203 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.71 Double_t TMarEvent::Eh

Definition at line 204 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.72 Double_t TMarEvent::Pzh

Definition at line 205 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.73 Double_t TMarEvent::Q2h

Definition at line 206 of file TMarEvent.h.

Referenced by ApplyCCBackgroundCuts(), CalculateDerivedVariables(), CCTriggerEfficiency(), Clear(), and FillFromHat().

6.20.4.74 Double_t TMarEvent::yh

Definition at line 207 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.75 Double_t TMarEvent::xh

Definition at line 208 of file TMarEvent.h.

Referenced by ApplyCCBackgroundCuts(), CalculateDerivedVariables(), CCTriggerEfficiency(), and Clear().

6.20.4.76 Double_t TMarEvent::Gammah

Definition at line 209 of file TMarEvent.h.

Referenced by ApplyCCBackgroundCuts(), CalculateDerivedVariables(), and PrintEventInfo().

6.20.4.77 Double_t TMarEvent::ptIronfrac

Definition at line 212 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.78 Double_t TMarEvent::EIronfrac

Definition at line 213 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.79 Double_t TMarEvent::ptSpacalfrac

Definition at line 214 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.80 Double_t TMarEvent::ESpacalfrac

Definition at line 215 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.81 Double_t TMarEvent::Ptda

Definition at line 219 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.82 Double_t TMarEvent::Q2da

Definition at line 220 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.83 Double_t TMarEvent::yda

Definition at line 221 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.84 Double_t TMarEvent::xda

Definition at line 222 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and Clear().

6.20.4.85 Double_t TMarEvent::Eda

Definition at line 223 of file TMarEvent.h.

Referenced by CalculateDerivedVariables().

6.20.4.86 Double_t TMarEvent::Pts

Definition at line 225 of file TMarEvent.h.

Referenced by FillFromHat().

6.20.4.87 Double_t TMarEvent::Q2s

Definition at line 226 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and FillFromHat().

6.20.4.88 Double_t TMarEvent::ys

Definition at line 227 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and FillFromHat().

6.20.4.89 Double_t TMarEvent::xs

Definition at line 228 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), and FillFromHat().

6.20.4.90 Double_t TMarEvent::Q2es

Definition at line 230 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.91 Double_t TMarEvent::xes

Definition at line 231 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.92 Double_t TMarEvent::yes

Definition at line 232 of file TMarEvent.h.

Referenced by CalculateDerivedVariables(), Clear(), and FillFromHat().

6.20.4.93 Double_t TMarEvent::tCJC

Definition at line 236 of file TMarEvent.h.

Referenced by Clear(), and FillFromHat().

6.20.4.94 Double_t TMarEvent::tLAr

Definition at line 237 of file TMarEvent.h.

Referenced by Clear(), and FillFromHat().

6.20.4.95 Double_t TMarEvent::MCWeight

Definition at line 240 of file TMarEvent.h.

Referenced by ApplyMCXSectionReweight(), ApplyTriggerEfficiencies(), Clear(), and FillFromHat().

6.20.4.96 Double_t TMarEvent::LumiWeight

Definition at line 241 of file TMarEvent.h.

Referenced by FillFromHat(), FillGeneratedParticlesAndCut(), MCGenSelection(), and TMarEvent().

6.20.4.97 Double_t TMarEvent::fTriggerWeight

Definition at line 242 of file TMarEvent.h.

Referenced by ApplyTriggerEfficiencies().

6.20.4.98 Double_t TMarEvent::fQCDWeight

Definition at line 243 of file TMarEvent.h.

Referenced by TMarEvent().

6.20.4.99 Float_t TMarEvent::Vparl

Definition at line 246 of file TMarEvent.h.

Referenced by Clear(), and FillFromHat().

6.20.4.100 Float_t TMarEvent::Vanti

Definition at line 247 of file TMarEvent.h.

Referenced by Clear(), and FillFromHat().

6.20.4.101 Byte_t TMarEvent::Il1ac[128]

Definition at line 250 of file TMarEvent.h.

Referenced by FillFromHat(), and SFHMarEvent::SFHMarEvent().

6.20.4.102 Byte_t TMarEvent::Il1rw[128]

Definition at line 251 of file TMarEvent.h.

Referenced by FillFromHat(), and SFHMarEvent::SFHMarEvent().

6.20.4.103 Byte_t TMarEvent::Il1te[192]

Definition at line 252 of file TMarEvent.h.

Referenced by FillFromHat(), and SFHMarEvent::SFHMarEvent().

6.20.4.104 Float_t TMarEvent::PtMinEle

Definition at line 257 of file TMarEvent.h.

Referenced by FindElePho(), main(), and TMarEvent().

6.20.4.105 Float_t TMarEvent::ThetaMinEle

Definition at line 258 of file TMarEvent.h.

Referenced by FindElePho(), main(), and TMarEvent().

6.20.4.106 Float_t TMarEvent::ThetaMaxEle

Definition at line 259 of file TMarEvent.h.

Referenced by FindElePho(), main(), and TMarEvent().

6.20.4.107 Float_t TMarEvent::ConeEle

Definition at line 260 of file TMarEvent.h.

Referenced by FindElePho(), and TMarEvent().

6.20.4.108 Float_t TMarEvent::PtMinMu

Definition at line 263 of file TMarEvent.h.

Referenced by FindMuon(), main(), and TMarEvent().

6.20.4.109 Float_t TMarEvent::ThetaMinMu

Definition at line 264 of file TMarEvent.h.

Referenced by FindMuon(), main(), and TMarEvent().

6.20.4.110 Float_t TMarEvent::ThetaMaxMu

Definition at line 265 of file TMarEvent.h.

Referenced by FindMuon(), main(), and TMarEvent().

6.20.4.111 Float_t TMarEvent::DTrTrMinMu

Definition at line 266 of file TMarEvent.h.

Referenced by FindMuon(), main(), and TMarEvent().

6.20.4.112 Float_t TMarEvent::PtMinJet

Definition at line 269 of file TMarEvent.h.

Referenced by FindJet(), main(), and TMarEvent().

6.20.4.113 Float_t TMarEvent::ThetaMinJet

Definition at line 270 of file TMarEvent.h.

Referenced by FindJet(), main(), and TMarEvent().

6.20.4.114 Float_t TMarEvent::ThetaMaxJet

Definition at line 271 of file TMarEvent.h.

Referenced by FindJet(), main(), and TMarEvent().

6.20.4.115 Float_t TMarEvent::RMinJet

Definition at line 272 of file TMarEvent.h.

Referenced by FindJet(), main(), and TMarEvent().

6.20.4.116 Float_t TMarEvent::EmFracJet

Definition at line 273 of file TMarEvent.h.

Referenced by FindJet(), main(), and TMarEvent().

6.20.4.117 Float_t TMarEvent::PtMinNp

Definition at line 276 of file TMarEvent.h.

Referenced by FindNP(), and TMarEvent().

6.20.4.118 Float_t TMarEvent::ThetaMinNp

Definition at line 277 of file TMarEvent.h.

Referenced by FindNP(), and TMarEvent().

6.20.4.119 Float_t TMarEvent::ThetaMaxNp

Definition at line 278 of file TMarEvent.h.

Referenced by FindNP(), and TMarEvent().

6.20.4.120 list<string> TMarEvent::RejectReason

Definition at line 282 of file TMarEvent.h.

Referenced by CCTriggerEfficiency(), Clear(), JJTriggerEfficiency(), and PrintEventInfo().

6.20.4.121 TTriggerReweight* TMarEvent::fTrigReweight

Definition at line 285 of file TMarEvent.h.

Referenced by CCTriggerEfficiency(), JJTriggerEfficiency(), TMarEvent(), and ~TMarEvent().

6.20.4.122 TMCXSectionReweight* TMarEvent::fMCReweight

Definition at line 288 of file TMarEvent.h.

Referenced by TMarEvent(), and ~TMarEvent().

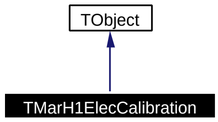
The documentation for this class was generated from the following files:

- **TMarEvent.h**
- **TMarEvent.C**

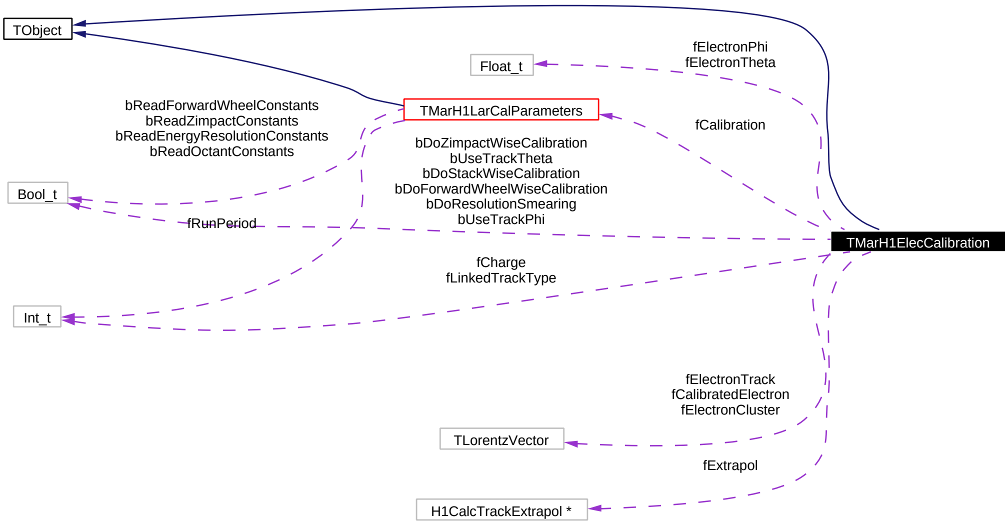
6.21 TMarH1ElecCalibration Class Reference

`#include <TMarH1ElecCalibration.h>`

Inheritance diagram for TMarH1ElecCalibration:



Collaboration diagram for TMarH1ElecCalibration:



Public Member Functions

- **TMarH1ElecCalibration** (Bool_t DoStackWiseCalibration, Bool_t DoZimpactWiseCalibration, Bool_t DoResolutionSmearing, Bool_t UseTrackTheta=false, Bool_t UseTrackPhi=true)
- ∼**TMarH1ElecCalibration** ()
- void **DoStackWiseCalibration** (Bool_t flag=true)
- void **DoZimpactWiseCalibration** (Bool_t flag=true)
- void **DoResolutionSmearing** (Bool_t flag=true)
- const TLorentzVector & **GetElecCalibration** (const TLorentzVector &UncalibratedElectron, const TLorentzVector &ElectronTrack, Int_t Charge, Float_t ZVertex, Bool_t IsMC, Int_t RunPeriod, Int_t LinkedTrackType)

Private Member Functions

- void **MakeVertexElectron** ()
- const TLorentzVector & **GetElectronVector** ()
- Bool_t **IsGoodTrack** ()

Private Attributes

- Bool_t **bUseTrackTheta**
- Bool_t **bUseTrackPhi**
- Bool_t **bDoStackWiseCalibration**
- Bool_t **bDoZimpactWiseCalibration**
- Bool_t **bDoForwardWheelWiseCalibration**
- Bool_t **bDoResolutionSmearing**
- **TMarH1LarCalParameters** * **fCalibration**
- H1CalcTrackExtrapol * **fExtrapol**
- TLorentzVector **fElectronTrack**
- TLorentzVector **fElectronCluster**
- TLorentzVector **fCalibratedElectron**
- Int_t **fCharge**
- Int_t **fLinkedTrackType**
- Float_t **fElectronTheta**
- Float_t **fElectronPhi**

6.21.1 Constructor & Destructor Documentation

6.21.1.1 TMarH1ElecCalibration::TMarH1ElecCalibration (Bool_t *DoStackWiseCalibration*, Bool_t *DoZimpactWiseCalibration*, Bool_t *DoResolutionSmearing*, Bool_t *UseTrackTheta* = false, Bool_t *UseTrackPhi* = true)

6.21.1.2 TMarH1ElecCalibration::~TMarH1ElecCalibration ()

Definition at line 77 of file TMarH1ElecCalibration.C.

References fExtrapol.

6.21.2 Member Function Documentation

6.21.2.1 void TMarH1ElecCalibration::MakeVertexElectron () `[private]`

Definition at line 276 of file TMarH1ElecCalibration.C.

References bUseTrackPhi, bUseTrackTheta, fCharge, fElectronCluster, fElectronPhi, fElectronTheta, fElectronTrack, fExtrapol, and IsGoodTrack().

Referenced by GetElectronVector().

6.21.2.2 const TLorentzVector & TMarH1ElecCalibration::GetElectronVector () `[private]`

Definition at line 311 of file TMarH1ElecCalibration.C.

References fElectronCluster, fElectronPhi, fElectronTheta, and MakeVertexElectron().

Referenced by GetElecCalibration().

6.21.2.3 Bool_t TMarH1ElecCalibration::IsGoodTrack () [private]

Definition at line 337 of file TMarH1ElecCalibration.C.

References fElectronCluster.

Referenced by MakeVertexElectron().

6.21.2.4 void TMarH1ElecCalibration::DoStackWiseCalibration (Bool_t *flag* = true) [inline]

Definition at line 53 of file TMarH1ElecCalibration.h.

References bDoStackWiseCalibration.

6.21.2.5 void TMarH1ElecCalibration::DoZimpactWiseCalibration (Bool_t *flag* = true) [inline]

Definition at line 54 of file TMarH1ElecCalibration.h.

References bDoZimpactWiseCalibration.

6.21.2.6 void TMarH1ElecCalibration::DoResolutionSmearing (Bool_t *flag* = true) [inline]

Definition at line 55 of file TMarH1ElecCalibration.h.

References bDoResolutionSmearing.

6.21.2.7 const TLorentzVector & TMarH1ElecCalibration::GetElecCalibration (const TLorentzVector & *UncalibratedElectron*, const TLorentzVector & *ElectronTrack*, Int_t *Charge*, Float_t *ZVertex*, Bool_t *IsMC*, Int_t *RunPeriod*, Int_t *LinkedTrackType*)

Definition at line 84 of file TMarH1ElecCalibration.C.

References bDoForwardWheelWiseCalibration, bDoResolutionSmearing, bDoStackWise-Calibration, bDoZimpactWiseCalibration, fCalibratedElectron, fCalibration, fCharge, f-ElectronCluster, fElectronTrack, fExtrapol, fLinkedTrackType, GetElectronVector(), TMar-H1LarCalParameters::GetForwardWheelCalibrationFactor(), TMarH1LarCalParameters::Get-OctantCalibrationFactor(), TMarH1LarCalParameters::GetResolutionSmearingFactor(), and TMarH1LarCalParameters::GetZimpactCalibrationFactor().

Referenced by TMarEvent::DefineInputParticles().

6.21.3 Member Data Documentation

6.21.3.1 Bool_t TMarH1ElecCalibration::bUseTrackTheta [private]

Definition at line 22 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and MakeVertexElectron().

6.21.3.2 Bool_t TMarH1ElecCalibration::bUseTrackPhi [private]

Definition at line 23 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and MakeVertexElectron().

6.21.3.3 Bool_t TMarH1ElecCalibration::bDoStackWiseCalibration [private]

Definition at line 25 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), DoStackWiseCalibration(), and GetElecCalibration().

6.21.3.4 Bool_t TMarH1ElecCalibration::bDoZimpactWiseCalibration [private]

Definition at line 26 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), DoZimpactWiseCalibration(), and GetElecCalibration().

6.21.3.5 Bool_t TMarH1ElecCalibration::bDoForwardWheelWiseCalibration [private]

Definition at line 27 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.21.3.6 Bool_t TMarH1ElecCalibration::bDoResolutionSmearing [private]

Definition at line 28 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), DoResolutionSmearing(), and GetElecCalibration().

6.21.3.7 TMarH1LarCalParameters* TMarH1ElecCalibration::fCalibration [private]

Definition at line 30 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.21.3.8 H1CalcTrackExtrapol* TMarH1ElecCalibration::fExtrapol [private]

Definition at line 32 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), MakeVertexElectron(), and ~TMarH1ElecCalibration().

6.21.3.9 TLorentzVector TMarH1ElecCalibration::fElectronTrack [private]

Definition at line 34 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), and MakeVertexElectron().

6.21.3.10 TLorentzVector TMarH1ElecCalibration::fElectronCluster [private]

Definition at line 35 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), GetElectronVector(), IsGoodTrack(), and MakeVertexElectron().

6.21.3.11 TLorentzVector TMarH1ElecCalibration::fCalibratedElectron [private]

Definition at line 36 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.21.3.12 Int_t TMarH1ElecCalibration::fCharge [private]

Definition at line 38 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElecCalibration(), and MakeVertexElectron().

6.21.3.13 Int_t TMarH1ElecCalibration::fLinkedTrackType [private]

Definition at line 39 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), and GetElecCalibration().

6.21.3.14 Float_t TMarH1ElecCalibration::fElectronTheta [private]

Definition at line 41 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElectronVector(), and MakeVertexElectron().

6.21.3.15 Float_t TMarH1ElecCalibration::fElectronPhi [private]

Definition at line 42 of file TMarH1ElecCalibration.h.

Referenced by ClassImp(), GetElectronVector(), and MakeVertexElectron().

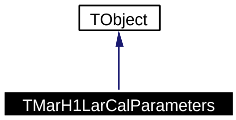
The documentation for this class was generated from the following files:

- **TMarH1ElecCalibration.h**
- **TMarH1ElecCalibration.C**

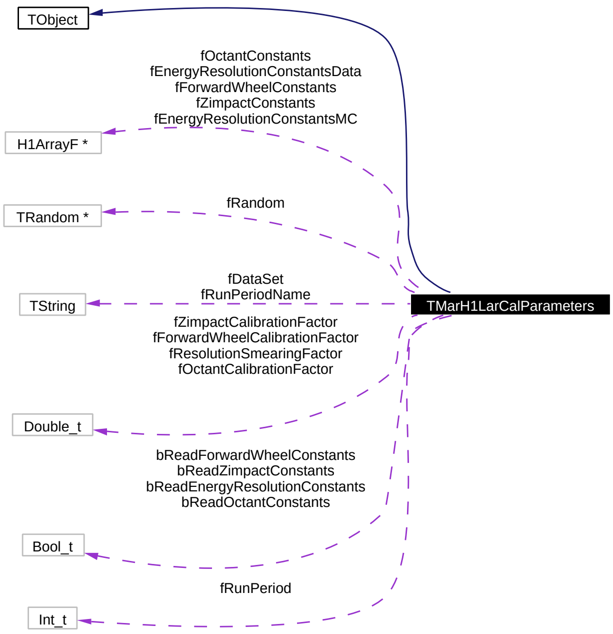
6.22 TMarH1LarCalParameters Class Reference

`#include <TMarH1LarCalParameters.h>`

Inheritance diagram for TMarH1LarCalParameters:



Collaboration diagram for TMarH1LarCalParameters:



Public Member Functions

- **TMarH1LarCalParameters** (TString DataSet, Int_t RunPeriod=5)
- ~**TMarH1LarCalParameters** ()
- void **SetCalibrationParametersFile** (TString filename)
- void **Reset** ()
- Double_t **GetOctantCalibrationFactor** (Float_t &phi, Float_t &zimpact)
- Double_t **GetZimpactCalibrationFactor** (Float_t &zimpact)
- Double_t **GetForwardWheelCalibrationFactor** (Float_t &zimpact)
- Double_t **GetResolutionSmearingFactor** (Float_t &zImpact)

Private Member Functions

- Int_t **SetLarOctant** (Float_t &phi)
- Int_t **SetLarWheel** (Float_t &zimpact)

- Int_t **SetLarZBin** (Float_t &zimpact, Int_t binsize)
- Int_t **SetForwardWheelZBin** (Float_t &zimpact)
- void **SetOctantConstants** ()
- void **SetZimpactConstants** ()
- void **SetForwardWheelConstants** ()
- void **SetEnergyResolutionConstants** ()
- void **SetOctantCalibrationFactors** (Float_t &phi, Float_t &zimpact)
- void **SetZimpactCalibrationFactors** (Float_t &zimpact)
- void **SetForwardWheelCalibrationFactors** (Float_t &zimpact)
- void **SetResolutionSmearingFactors** (Float_t &zimpact)

Private Attributes

- TString **fDataSet**
- Int_t **fRunPeriod**
- TString **fRunPeriodName**
- H1ArrayF * **fOctantConstants**
- H1ArrayF * **fZimpactConstants**
- H1ArrayF * **fForwardWheelConstants**
- H1ArrayF * **fEnergyResolutionConstantsData**
- H1ArrayF * **fEnergyResolutionConstantsMC**
- Double_t **fOctantCalibrationFactor**
- Double_t **fZimpactCalibrationFactor**
- Double_t **fForwardWheelCalibrationFactor**
- Double_t **fResolutionSmearingFactor**
- Bool_t **bReadOctantConstants**
- Bool_t **bReadZimpactConstants**
- Bool_t **bReadForwardWheelConstants**
- Bool_t **bReadEnergyResolutionConstants**
- TRandom * **fRandom**

6.22.1 Constructor & Destructor Documentation

6.22.1.1 TMarH1LarCalParameters::TMarH1LarCalParameters (TString *DataSet*, Int_t *RunPeriod* = 5)

6.22.1.2 TMarH1LarCalParameters::~TMarH1LarCalParameters ()

Definition at line 62 of file TMarH1LarCalParameters.C.

References fEnergyResolutionConstantsData, fEnergyResolutionConstantsMC, fForwardWheel-Constants, fOctantConstants, fRandom, and fZimpactConstants.

6.22.2 Member Function Documentation

6.22.2.1 void TMarH1LarCalParameters::SetCalibrationParametersFile (TString *filename*)

Definition at line 99 of file TMarH1LarCalParameters.C.

References fRunPeriod, and fRunPeriodName.

Referenced by SetEnergyResolutionConstants(), SetForwardWheelConstants(), SetOctant-Constants(), and SetZimpactConstants().

6.22.2.2 void TMarH1LarCalParameters::Reset ()

Definition at line 88 of file TMarH1LarCalParameters.C.

References bReadEnergyResolutionConstants, bReadForwardWheelConstants, bReadOctant-Constants, and bReadZimpactConstants.

Referenced by ClassImp().

6.22.2.3 Double_t TMarH1LarCalParameters::GetOctantCalibrationFactor (Float_t & *phi*, Float_t & *zimpact*)

Definition at line 122 of file TMarH1LarCalParameters.C.

References fOctantCalibrationFactor, SetOctantCalibrationFactors(), and SetOctantConstants().

Referenced by TMarH1ElecCalibration::GetElecCalibration().

6.22.2.4 Double_t TMarH1LarCalParameters::GetZimpactCalibrationFactor (Float_t & *zimpact*)

Definition at line 131 of file TMarH1LarCalParameters.C.

References fZimpactCalibrationFactor, SetZimpactCalibrationFactors(), and SetZimpact-Constants().

Referenced by TMarH1ElecCalibration::GetElecCalibration().

6.22.2.5 Double_t TMarH1LarCalParameters::GetForwardWheelCalibrationFactor (Float_t & *zimpact*)

Definition at line 139 of file TMarH1LarCalParameters.C.

References fForwardWheelCalibrationFactor, SetForwardWheelCalibrationFactors(), and Set-ForwardWheelConstants().

Referenced by TMarH1ElecCalibration::GetElecCalibration().

6.22.2.6 Double_t TMarH1LarCalParameters::GetResolutionSmearingFactor (Float_t & *zImpact*)

Definition at line 147 of file TMarH1LarCalParameters.C.

References fResolutionSmearingFactor, SetEnergyResolutionConstants(), and SetResolution-SmearingFactors().

Referenced by TMarH1ElecCalibration::GetElecCalibration().

6.22.2.7 Int_t TMarH1LarCalParameters::SetLarOctant (Float_t & *phi*) `[private]`

Definition at line 329 of file TMarH1LarCalParameters.C.

Referenced by SetOctantCalibrationFactors().

6.22.2.8 Int_t TMarH1LarCalParameters::SetLarWheel (Float_t & *zimpact*) [private]

Definition at line 342 of file TMarH1LarCalParameters.C.

Referenced by SetOctantCalibrationFactors().

6.22.2.9 Int_t TMarH1LarCalParameters::SetLarZBin (Float_t & *zimpact*, Int_t *binsize*) [private]

Definition at line 368 of file TMarH1LarCalParameters.C.

Referenced by SetResolutionSmearingFactors(), and SetZimpactCalibrationFactors().

6.22.2.10 Int_t TMarH1LarCalParameters::SetForwardWheelZBin (Float_t & *zimpact*) [private]

Definition at line 377 of file TMarH1LarCalParameters.C.

Referenced by SetForwardWheelCalibrationFactors().

6.22.2.11 void TMarH1LarCalParameters::SetOctantConstants () [private]

Definition at line 155 of file TMarH1LarCalParameters.C.

References bReadOctantConstants, fDataSet, fOctantConstants, and SetCalibrationParametersFile().

Referenced by GetOctantCalibrationFactor().

6.22.2.12 void TMarH1LarCalParameters::SetZimpactConstants () [private]

Definition at line 180 of file TMarH1LarCalParameters.C.

References bReadZimpactConstants, fDataSet, fZimpactConstants, and SetCalibrationParametersFile().

Referenced by GetZimpactCalibrationFactor().

6.22.2.13 void TMarH1LarCalParameters::SetForwardWheelConstants () [private]

Definition at line 205 of file TMarH1LarCalParameters.C.

References bReadForwardWheelConstants, fDataSet, fForwardWheelConstants, and SetCalibrationParametersFile().

Referenced by GetForwardWheelCalibrationFactor().

6.22.2.14 void TMarH1LarCalParameters::SetEnergyResolutionConstants () [private]

Definition at line 231 of file TMarH1LarCalParameters.C.

References bReadEnergyResolutionConstants, fDataSet, fEnergyResolutionConstantsData, fEnergyResolutionConstantsMC, fRunPeriodName, and SetCalibrationParametersFile().

Referenced by GetResolutionSmearingFactor().

6.22.2.15 void TMarH1LarCalParameters::SetOctantCalibrationFactors (Float_t & *phi*, Float_t & *zimpact*) [private]

Definition at line 254 of file TMarH1LarCalParameters.C.

References fOctantCalibrationFactor, fOctantConstants, SetLarOctant(), and SetLarWheel().

Referenced by GetOctantCalibrationFactor().

6.22.2.16 void TMarH1LarCalParameters::SetZimpactCalibrationFactors (Float_t & *zimpact*) [private]

Definition at line 275 of file TMarH1LarCalParameters.C.

References fZimpactCalibrationFactor, fZimpactConstants, and SetLarZBin().

Referenced by GetZimpactCalibrationFactor().

6.22.2.17 void TMarH1LarCalParameters::SetForwardWheelCalibrationFactors (Float_t & *zimpact*) [private]

Definition at line 288 of file TMarH1LarCalParameters.C.

References fForwardWheelCalibrationFactor, fForwardWheelConstants, and SetForwardWheelZBin().

Referenced by GetForwardWheelCalibrationFactor().

6.22.2.18 void TMarH1LarCalParameters::SetResolutionSmearingFactors (Float_t & *zimpact*) [private]

Definition at line 300 of file TMarH1LarCalParameters.C.

References fEnergyResolutionConstantsData, fEnergyResolutionConstantsMC, fRandom, fResolutionSmearingFactor, and SetLarZBin().

Referenced by GetResolutionSmearingFactor().

6.22.3 Member Data Documentation

6.22.3.1 TString TMarH1LarCalParameters::fDataSet [private]

Definition at line 14 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetForwardWheelConstants(), SetOctantConstants(), and SetZimpactConstants().

6.22.3.2 Int_t TMarH1LarCalParameters::fRunPeriod [private]

Definition at line 15 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), and SetCalibrationParametersFile().

6.22.3.3 TString TMarH1LarCalParameters::fRunPeriodName [private]

Definition at line 16 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetCalibrationParametersFile(), and SetEnergyResolutionConstants().

6.22.3.4 H1ArrayF* TMarH1LarCalParameters::fOctantConstants [private]

Definition at line 18 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetOctantCalibrationFactors(), SetOctantConstants(), and ~TMarH1LarCalParameters().

6.22.3.5 H1ArrayF* TMarH1LarCalParameters::fZimpactConstants [private]

Definition at line 19 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetZimpactCalibrationFactors(), SetZimpactConstants(), and ~TMarH1LarCalParameters().

6.22.3.6 H1ArrayF* TMarH1LarCalParameters::fForwardWheelConstants [private]

Definition at line 20 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetForwardWheelCalibrationFactors(), SetForwardWheelConstants(), and ~TMarH1LarCalParameters().

6.22.3.7 H1ArrayF* TMarH1LarCalParameters::fEnergyResolutionConstantsData [private]

Definition at line 21 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetResolutionSmearingFactors(), and ~TMarH1LarCalParameters().

6.22.3.8 H1ArrayF* TMarH1LarCalParameters::fEnergyResolutionConstantsMC [private]

Definition at line 22 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetEnergyResolutionConstants(), SetResolutionSmearingFactors(), and ~TMarH1LarCalParameters().

6.22.3.9 Double_t TMarH1LarCalParameters::fOctantCalibrationFactor [private]

Definition at line 24 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), GetOctantCalibrationFactor(), and SetOctantCalibrationFactors().

6.22.3.10 Double_t TMarH1LarCalParameters::fZimpactCalibrationFactor [private]

Definition at line 25 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), GetZimpactCalibrationFactor(), and SetZimpactCalibrationFactors().

6.22.3.11 Double_t TMarH1LarCalParameters::fForwardWheelCalibrationFactor [private]

Definition at line 26 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), GetForwardWheelCalibrationFactor(), and SetForwardWheel-CalibrationFactors().

6.22.3.12 Double_t TMarH1LarCalParameters::fResolutionSmearingFactor [private]

Definition at line 27 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), GetResolutionSmearingFactor(), and SetResolutionSmearingFactors().

6.22.3.13 Bool_t TMarH1LarCalParameters::bReadOctantConstants [private]

Definition at line 29 of file TMarH1LarCalParameters.h.

Referenced by Reset(), and SetOctantConstants().

6.22.3.14 Bool_t TMarH1LarCalParameters::bReadZimpactConstants [private]

Definition at line 30 of file TMarH1LarCalParameters.h.

Referenced by Reset(), and SetZimpactConstants().

6.22.3.15 Bool_t TMarH1LarCalParameters::bReadForwardWheelConstants [private]

Definition at line 31 of file TMarH1LarCalParameters.h.

Referenced by Reset(), and SetForwardWheelConstants().

6.22.3.16 Bool_t TMarH1LarCalParameters::bReadEnergyResolutionConstants [private]

Definition at line 32 of file TMarH1LarCalParameters.h.

Referenced by Reset(), and SetEnergyResolutionConstants().

6.22.3.17 TRandom* TMarH1LarCalParameters::fRandom [private]

Definition at line 34 of file TMarH1LarCalParameters.h.

Referenced by ClassImp(), SetResolutionSmearingFactors(), and ~TMarH1LarCalParameters().

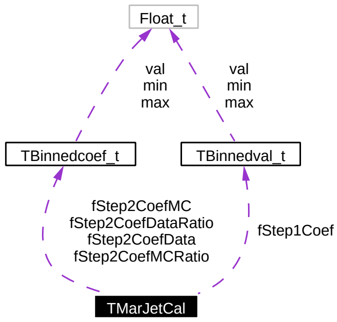
The documentation for this class was generated from the following files:

- **TMarH1LarCalParameters.h**
- **TMarH1LarCalParameters.C**

6.23 TMarJetCal Class Reference

`#include <TMarJetCal.h>`

Collaboration diagram for TMarJetCal:



Public Member Functions

- **TMarJetCal** ()
- **TMarJetCal** (Char_t ∗FileStep1, Char_t ∗FileStep2Data, Char_t ∗FileStep2MC)
- **TMarJetCal** (Char_t ∗FileStep2Data, Char_t ∗FileStep2MC)
- **TMarJetCal** (Char_t ∗FileStep2Data, Char_t ∗FileStep2MC, Char_t ∗FileStep2DataRatio, Char_t ∗FileStep2MCRatio)
- ∼**TMarJetCal** ()
- Float_t **ApplyCalib** (Float_t Ptjetnocal, Float_t Thetajet, Int_t MCFlag, Int_t option)
- TLorentzVector **ApplyHadroo2Calib** (TLorentzVector tracks, TLorentzVector clusters, Float_t thetajet, Short_t MCFlag)
- TLorentzVector **MyHadroo2KtJetCalibration** (H1PartJet ∗UncalJet, Short_t MCFlag)
- TLorentzVector **MyHadroo2TestJetCalibration** (H1PartJet ∗UncalJet, Short_t MCFlag)

Public Attributes

- **TBinnedval_t fStep1Coef** [NBTHETABINS]
- **TBinnedcoef_t fStep2CoefData** [NBTHETABINS]
- **TBinnedcoef_t fStep2CoefMC** [NBTHETABINS]
- **TBinnedcoef_t fStep2CoefDataRatio** [NBTHETABINS]
- **TBinnedcoef_t fStep2CoefMCRatio** [NBTHETABINS]

6.23.1 Constructor & Destructor Documentation

6.23.1.1 TMarJetCal::TMarJetCal ()

Definition at line 22 of file TMarJetCal.C.

References fStep1Coef, fStep2CoefData, fStep2CoefMC, NBTHETABINS, TBinnedcoef_t::val, and TBinnedval_t::val.

6.23.1.2 TMarJetCal::TMarJetCal (Char_t * *FileStep1*, Char_t * *FileStep2Data*, Char_t * *FileStep2MC*)

Definition at line 37 of file TMarJetCal.C.

References fStep1Coef, fStep2CoefData, fStep2CoefMC, TBinnedcoef_t::min, TBinnedval_t::min, NBTHETABINS, TBinnedcoef_t::val, and TBinnedval_t::val.

6.23.1.3 TMarJetCal::TMarJetCal (Char_t * *FileStep2Data*, Char_t * *FileStep2MC*)

Definition at line 112 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefMC, TBinnedcoef_t::min, NBTHETABINS, and TBinnedcoef_t::val.

6.23.1.4 TMarJetCal::TMarJetCal (Char_t * *FileStep2Data*, Char_t * *FileStep2MC*, Char_t * *FileStep2DataRatio*, Char_t * *FileStep2MCRatio*)

Definition at line 170 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefDataRatio, fStep2CoefMC, fStep2CoefMCRatio, TBinnedcoef_t::min, NBTHETABINS, and TBinnedcoef_t::val.

6.23.1.5 TMarJetCal::∼TMarJetCal ()

Definition at line 280 of file TMarJetCal.C.

6.23.2 Member Function Documentation

6.23.2.1 Float_t TMarJetCal::ApplyCalib (Float_t *Ptjetnocal*, Float_t *Thetajet*, Int_t *MCFlag*, Int_t *option*)

Definition at line 288 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefMC, TBinnedcoef_t::min, MYR2D, and NBTHETABINS.

6.23.2.2 TLorentzVector TMarJetCal::ApplyHadroo2Calib (TLorentzVector *tracks*, TLorentzVector *clusters*, Float_t *thetajet*, Short_t *MCFlag*)

Definition at line 547 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefDataRatio, fStep2CoefMC, fStep2CoefMCRatio, TBinnedcoef_t::min, MYR2D, NBTHETABINS, and TBinnedcoef_t::val.

6.23.2.3 TLorentzVector TMarJetCal::MyHadroo2KtJetCalibration (H1PartJet * *UncalJet*, Short_t *MCFlag*)

Definition at line 663 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefDataRatio, fStep2CoefMC, fStep2CoefMCRatio, TBinnedcoef_t::min, MYR2D, NBTHETABINS, and TBinnedcoef_t::val.

6.23.2.4 TLorentzVector TMarJetCal::MyHadroo2TestJetCalibration (H1PartJet * *UncalJet*, Short_t *MCFlag*)

Definition at line 839 of file TMarJetCal.C.

References fStep2CoefData, fStep2CoefDataRatio, fStep2CoefMC, fStep2CoefMCRatio, TBinnedcoef_t::min, MYR2D, NBTHETABINS, and TBinnedcoef_t::val.

6.23.3 Member Data Documentation

6.23.3.1 TBinnedval_t TMarJetCal::fStep1Coef[NBTHETABINS]

Definition at line 61 of file TMarJetCal.h.

Referenced by TMarJetCal().

6.23.3.2 TBinnedcoef_t TMarJetCal::fStep2CoefData[NBTHETABINS]

Definition at line 62 of file TMarJetCal.h.

Referenced by ApplyCalib(), ApplyHadroo2Calib(), MyHadroo2KtJetCalibration(), MyHadroo2TestJetCalibration(), and TMarJetCal().

6.23.3.3 TBinnedcoef_t TMarJetCal::fStep2CoefMC[NBTHETABINS]

Definition at line 63 of file TMarJetCal.h.

Referenced by ApplyCalib(), ApplyHadroo2Calib(), MyHadroo2KtJetCalibration(), MyHadroo2TestJetCalibration(), and TMarJetCal().

6.23.3.4 TBinnedcoef_t TMarJetCal::fStep2CoefDataRatio[NBTHETABINS]

Definition at line 64 of file TMarJetCal.h.

Referenced by ApplyHadroo2Calib(), MyHadroo2KtJetCalibration(), MyHadroo2TestJetCalibration(), and TMarJetCal().

6.23.3.5 TBinnedcoef_t TMarJetCal::fStep2CoefMCRatio[NBTHETABINS]

Definition at line 65 of file TMarJetCal.h.

Referenced by ApplyHadroo2Calib(), MyHadroo2KtJetCalibration(), MyHadroo2TestJetCalibration(), and TMarJetCal().

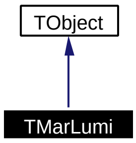
The documentation for this class was generated from the following files:

- **TMarJetCal.h**
- **TMarJetCal.C**

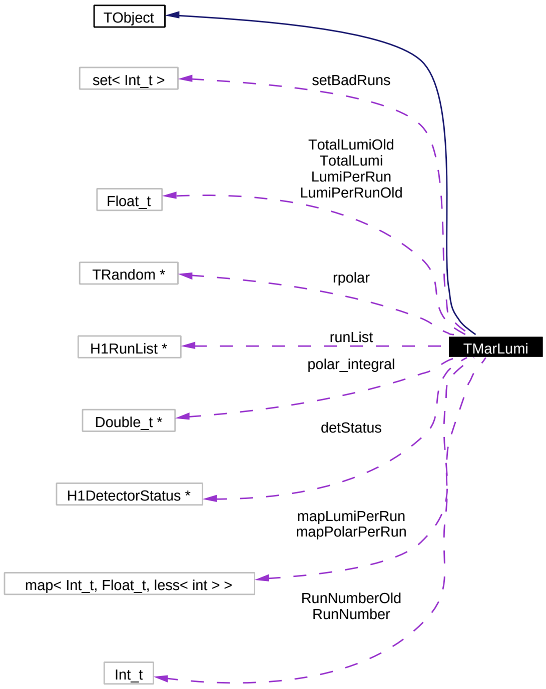
6.24 TMarLumi Class Reference

`#include <TMarLumi.h>`

Inheritance diagram for TMarLumi:



Collaboration diagram for TMarLumi:



Public Member Functions

- Bool_t **IsDataL** (Int_t &irun)
- Bool_t **IsDataR** (Int_t &irun)
- Float_t **GetPolar** ()
- **TMarLumi** (string, string)
- ∼**TMarLumi** ()
- Bool_t **Update** (Int_t nrun)

Public Attributes

- Int_t **RunNumber**

- Int_t **RunNumberOld**
- Float_t **LumiPerRun**
- Float_t **TotalLumi**
- Float_t **LumiPerRunOld**
- Float_t **TotalLumiOld**
- map< Int_t, Float_t, less< int > > **mapLumiPerRun**
- map< Int_t, Float_t, less< int > > **mapPolarPerRun**
- set< Int_t > **setBadRuns**
- H1RunList * **runList**
- H1DetectorStatus * **detStatus**
- TRandom * **rpolar**
- Double_t * **polar_integral**

6.24.1 Constructor & Destructor Documentation

6.24.1.1 TMarLumi::TMarLumi (string, string)

6.24.1.2 TMarLumi::~TMarLumi ()

Definition at line 146 of file TMarLumi.C.

6.24.2 Member Function Documentation

6.24.2.1 Bool_t TMarLumi::IsDataL (Int_t & *irun*)

Definition at line 199 of file TMarLumi.C.

Referenced by ClassImp().

6.24.2.2 Bool_t TMarLumi::IsDataR (Int_t & *irun*)

Definition at line 209 of file TMarLumi.C.

Referenced by ClassImp().

6.24.2.3 Float_t TMarLumi::GetPolar ()

Definition at line 186 of file TMarLumi.C.

References polar_integral, and rpolar.

Referenced by TMarEvent::ApplyMCXSectionReweight().

6.24.2.4 Bool_t TMarLumi::Update (Int_t *nrun*)

Definition at line 152 of file TMarLumi.C.

References LumiPerRun, LumiPerRunOld, runList, RunNumber, RunNumberOld, TotalLumi, and TotalLumiOld.

Referenced by TMarEvent::Init().

6.24.3 Member Data Documentation

6.24.3.1 Int_t TMarLumi::RunNumber

Definition at line 40 of file TMarLumi.h.

Referenced by ClassImp(), and Update().

6.24.3.2 Int_t TMarLumi::RunNumberOld

Definition at line 41 of file TMarLumi.h.

Referenced by ClassImp(), and Update().

6.24.3.3 Float_t TMarLumi::LumiPerRun

Definition at line 42 of file TMarLumi.h.

Referenced by ClassImp(), and Update().

6.24.3.4 Float_t TMarLumi::TotalLumi

Definition at line 43 of file TMarLumi.h.

Referenced by ClassImp(), and Update().

6.24.3.5 Float_t TMarLumi::LumiPerRunOld

Definition at line 44 of file TMarLumi.h.

Referenced by ClassImp(), THisto::FillLumi(), and Update().

6.24.3.6 Float_t TMarLumi::TotalLumiOld

Definition at line 45 of file TMarLumi.h.

Referenced by ClassImp(), THisto::FillLumi(), and Update().

6.24.3.7 map<Int_t,Float_t, less<int> > TMarLumi::mapLumiPerRun

Definition at line 46 of file TMarLumi.h.

6.24.3.8 map<Int_t,Float_t, less<int> > TMarLumi::mapPolarPerRun

Definition at line 47 of file TMarLumi.h.

6.24.3.9 set<Int_t> TMarLumi::setBadRuns

Definition at line 49 of file TMarLumi.h.

6.24.3.10 H1RunList* TMarLumi::runList

Definition at line 52 of file TMarLumi.h.

Referenced by ClassImp(), and Update().

6.24.3.11 H1DetectorStatus* TMarLumi::detStatus

Definition at line 53 of file TMarLumi.h.

Referenced by ClassImp(), and TMarEvent::Init().

6.24.3.12 TRandom* TMarLumi::rpolar

Definition at line 55 of file TMarLumi.h.

Referenced by ClassImp(), and GetPolar().

6.24.3.13 Double_t* TMarLumi::polar_integral

Definition at line 59 of file TMarLumi.h.

Referenced by ClassImp(), and GetPolar().

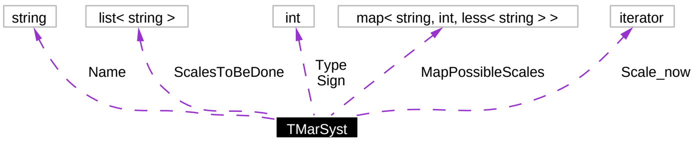
The documentation for this class was generated from the following files:

- **TMarLumi.h**
- **TMarLumi.C**

6.25 TMarSyst Class Reference

`#include <TMarSyst.h>`

Collaboration diagram for TMarSyst:



Public Member Functions

- **TMarSyst** ()
- ~**TMarSyst** ()
- Int_t **Next** ()
- void **ScaleEnergyPartEm** (vector< **TMarBody** > &PartList, const Double_t &Zvtx,const Int_t RunYear, const Int_t Correlation=0)
- void **ScaleThetaPartEm** (vector< **TMarBody** > &PartList, const Int_t RunYear)
- void **ScaleEnergyPartJet** (vector< **TMarBody** > &PartList, TLorentzVector &HadJetVec,TLorentzVector &HadNoJetVec, const Int_t RunYear,const Int_t Correlation=0)
- void **ScaleThetaPartJet** (vector< **TMarBody** > &PartList, TLorentzVector &HadJetVec)
- void **ScalePtPartMuon** (vector< **TMarBody** > &PartList)
- void **ScaleThetaPartMuon** (vector< **TMarBody** > &PartList, const Int_t RunYear)
- void **ScaleNoiseHFS** (TLorentzVector &HadNoJetVec)
- **TMarSyst** & **operator=** (const **TMarSyst** &other)

Public Attributes

- int **Type**
- int **Sign**
- string **Name**
- list< string >::iterator **Scale_now**
- map< string, int, less< string > > **MapPossibleScales**
- list< string > **ScalesToBeDone**

Friends

- istream & **operator>>** (istream &in, **TMarSyst** &CutMC)
- ostream & **operator<<** (ostream &out, **TMarSyst** &CutMC)

6.25.1 Constructor & Destructor Documentation

6.25.1.1 TMarSyst::TMarSyst ()

Definition at line 14 of file TMarSyst.C.

References MapPossibleScales, Name, Scale_now, ScalesToBeDone, Sign, and Type.

6.25.1.2 TMarSyst::~TMarSyst ()

Definition at line 122 of file TMarSyst.C.

References MapPossibleScales, and ScalesToBeDone.

6.25.2 Member Function Documentation

6.25.2.1 Int_t TMarSyst::Next ()

Definition at line 150 of file TMarSyst.C.

References MapPossibleScales, Name, Scale_now, ScalesToBeDone, Sign, and Type.

Referenced by TMarEvent::Next().

6.25.2.2 void TMarSyst::ScaleEnergyPartEm (vector< TMarBody > & *PartList*, const Double_t & *Zvtx*, const Int_t *RunYear*, const Int_t *Correlation* = 0)

Definition at line 172 of file TMarSyst.C.

References MYR2D, Sign, TMarEvent::Y0304, and TMarEvent::Y05.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.3 void TMarSyst::ScaleThetaPartEm (vector< TMarBody > & *PartList*, const Int_t *RunYear*)

Definition at line 236 of file TMarSyst.C.

References MYR2D, Sign, TMarEvent::Y0304, and TMarEvent::Y05.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.4 void TMarSyst::ScaleEnergyPartJet (vector< TMarBody > & *PartList*, TLorentzVector & *HadJetVec*, TLorentzVector & *HadNoJetVec*, const Int_t *RunYear*, const Int_t *Correlation* = 0)

Definition at line 276 of file TMarSyst.C.

References MYR2D, and Sign.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.5 void TMarSyst::ScaleThetaPartJet (vector< TMarBody > & *PartList*, TLorentzVector & *HadJetVec*)

Definition at line 318 of file TMarSyst.C.

References MYR2D, and Sign.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.6 void TMarSyst::ScalePtPartMuon (vector< TMarBody > & *PartList*)

Definition at line 363 of file TMarSyst.C.

References Sign.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.7 void TMarSyst::ScaleThetaPartMuon (vector< TMarBody > & *PartList*, const Int_t *RunYear*)

Definition at line 385 of file TMarSyst.C.

References MYR2D, Sign, TMarEvent::Y0304, and TMarEvent::Y05.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.8 void TMarSyst::ScaleNoiseHFS (TLorentzVector & *HadNoJetVec*)

Definition at line 421 of file TMarSyst.C.

References Sign.

Referenced by TMarEvent::ApplySystematicShifts().

6.25.2.9 TMarSyst & TMarSyst::operator= (const TMarSyst & *other*)

Definition at line 140 of file TMarSyst.C.

References MapPossibleScales, Name, ScalesToBeDone, Sign, and Type.

6.25.3 Friends And Related Function Documentation

6.25.3.1 istream& operator>> (istream & *in*, TMarSyst & *CutMC*) `[friend]`

Definition at line 92 of file TMarSyst.C.

6.25.3.2 ostream& operator<< (ostream & *out*, TMarSyst & *CutMC*) `[friend]`

Definition at line 128 of file TMarSyst.C.

6.25.4 Member Data Documentation

6.25.4.1 int TMarSyst::Type

Definition at line 33 of file TMarSyst.h.

Referenced by Next(), TMarEvent::Next(), operator=(), and TMarSyst().

6.25.4.2 int TMarSyst::Sign

Definition at line 36 of file TMarSyst.h.

Referenced by Next(), TMarEvent::Next(), operator=(), ScaleEnergyPartEm(), ScaleEnergyPartJet(), ScaleNoiseHFS(), ScalePtPartMuon(), ScaleThetaPartEm(), ScaleThetaPartJet(), ScaleThetaPartMuon(), and TMarSyst().

6.25.4.3 string TMarSyst::Name

Definition at line 39 of file TMarSyst.h.

Referenced by Next(), TMarEvent::Next(), MarSysBinningFun::operator()(), operator=(), and TMarSyst().

6.25.4.4 list<string>::iterator TMarSyst::Scale_now

Definition at line 42 of file TMarSyst.h.

Referenced by Next(), and TMarSyst().

6.25.4.5 map< string, int, less<string> > TMarSyst::MapPossibleScales

Definition at line 45 of file TMarSyst.h.

Referenced by Next(), operator=(), operator>>(), TMarSyst(), and ~TMarSyst().

6.25.4.6 list<string> TMarSyst::ScalesToBeDone

Definition at line 48 of file TMarSyst.h.

Referenced by MarSysBinningFun::MarSysBinningFun(), Next(), operator<<(), operator=(), operator>>(), TMarSyst(), TRunHisto::TRunHisto(), and ~TMarSyst().

The documentation for this class was generated from the following files:

- **TMarSyst.h**
- **TMarSyst.C**

6.26 TMCXSectionReweight Class Reference

`#include <TMCXSectionReweight.h>`

Public Member Functions

- Double_t **GetEpvecNLOWeight** (H1PartMCArrayPtr GenPart, Float_t pBeamEnergy, Int_t DecayType)
- Double_t **GetQCDWeight** (Double_t &xGen, Double_t &Q2Gen, Double_t &pola, Short_t &LeptonCharge, Short_t &MCType)
- **TMCXSectionReweight** ()

Private Member Functions

- Float_t **nlocorr_** (Float_t *y, Float_t *pt, Int_t *bsign, Float_t *ene, Int_t *opt, Float_t *code)

6.26.1 Constructor & Destructor Documentation

6.26.1.1 TMCXSectionReweight::TMCXSectionReweight ()

Definition at line 15 of file TMCXSectionReweight.C.

6.26.2 Member Function Documentation

6.26.2.1 Float_t TMCXSectionReweight::nlocorr_ (Float_t * *y*, Float_t * *pt*, Int_t * *bsign*, Float_t * *ene*, Int_t * *opt*, Float_t * *code*) `[private]`

Definition at line 146 of file TMCXSectionReweight.C.

Referenced by GetEpvecNLOWeight().

6.26.2.2 Double_t TMCXSectionReweight::GetEpvecNLOWeight (H1PartMCArrayPtr *GenPart*, Float_t *pBeamEnergy*, Int_t *DecayType*)

Definition at line 93 of file TMCXSectionReweight.C.

References nlocorr_().

6.26.2.3 Double_t TMCXSectionReweight::GetQCDWeight (Double_t & *xGen*, Double_t & *Q2Gen*, Double_t & *pola*, Short_t & *LeptonCharge*, Short_t & *MCType*)

Definition at line 34 of file TMCXSectionReweight.C.

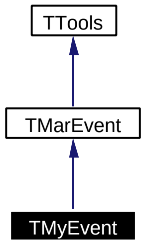
The documentation for this class was generated from the following files:

- **TMCXSectionReweight.h**
- **TMCXSectionReweight.C**

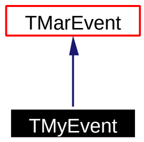
6.27 TMyEvent Class Reference

`#include <TMyEvent.h>`

Inheritance diagram for TMyEvent:



Collaboration diagram for TMyEvent:



Public Member Functions

- void **Clear** (void)
- Bool_t **FillFromMods** ()
- Bool_t **FillFromHat** ()
- Bool_t **Next** ()
- Int_t **FindElePho** ()
- Int_t **FindMuon** ()
- Int_t **FindNP** ()
- Int_t **FindJet** ()
- void **SelectParticles** ()
- **TMyEvent** (const **TRun** ∗run=NULL)
- ∼**TMyEvent** ()

6.27.1 Constructor & Destructor Documentation

6.27.1.1 TMyEvent::TMyEvent (const TRun ∗ *run* = NULL)

6.27.1.2 TMyEvent::∼TMyEvent ()

Definition at line 36 of file TMyEvent.C.

6.27.2 Member Function Documentation

6.27.2.1 void TMyEvent::Clear (void) [virtual]

Reimplemented from **TMarEvent** (p. 87).

Definition at line 139 of file TMyEvent.C.

References TMarEvent::Clear().

6.27.2.2 Bool_t TMyEvent::FillFromMods () [virtual]

Reimplemented from **TMarEvent** (p. 88).

Definition at line 64 of file TMyEvent.C.

References TMarEvent::FillFromMods().

6.27.2.3 Bool_t TMyEvent::FillFromHat () [virtual]

Reimplemented from **TMarEvent** (p. 88).

Definition at line 75 of file TMyEvent.C.

References TMarEvent::FillFromHat().

6.27.2.4 Bool_t TMyEvent::Next () [virtual]

Reimplemented from **TTools** (p. 147).

Definition at line 123 of file TMyEvent.C.

References TTools::Next().

6.27.2.5 Int_t TMyEvent::FindElePho () [virtual]

Reimplemented from **TMarEvent** (p. 89).

Definition at line 85 of file TMyEvent.C.

Referenced by SelectParticles().

6.27.2.6 Int_t TMyEvent::FindMuon () [virtual]

Reimplemented from **TMarEvent** (p. 89).

Definition at line 94 of file TMyEvent.C.

Referenced by SelectParticles().

6.27.2.7 Int_t TMyEvent::FindNP () [virtual]

Reimplemented from **TMarEvent** (p. 89).

Definition at line 103 of file TMyEvent.C.

Referenced by SelectParticles().

6.27.2.8 Int_t TMyEvent::FindJet () [virtual]

Reimplemented from **TMarEvent** (p. 89).

Definition at line 111 of file TMyEvent.C.

Referenced by SelectParticles().

6.27.2.9 void TMyEvent::SelectParticles () [virtual]

Reimplemented from **TMarEvent** (p. 90).

Definition at line 44 of file TMyEvent.C.

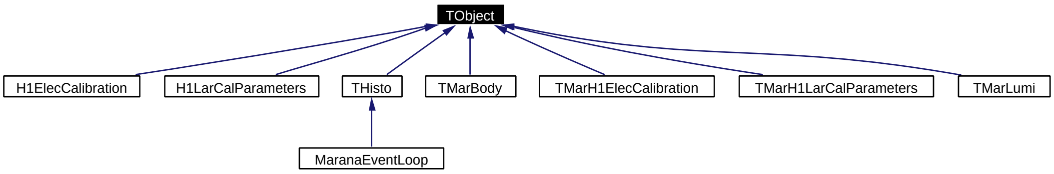
References TMarEvent::find_ElePho, TMarEvent::find_Jet, TMarEvent::find_Muon, TMarEvent::find_NP, FindElePho(), FindJet(), FindMuon(), and FindNP().

The documentation for this class was generated from the following files:

- **TMyEvent.h**
- **TMyEvent.C**

6.28 TObject Class Reference

Inheritance diagram for TObject:



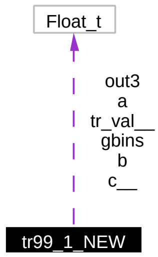
The documentation for this class was generated from the following file:

- **TMarH1LarCalParameters.h**

6.29 tr99_1_NEW Struct Reference

`#include <TTriggerReweight.h>`

Collaboration diagram for tr99_1_NEW:



Public Attributes

- Float_t **a** [10]
- Float_t **b** [10]
- Float_t **c__** [10]
- Float_t **gbins** [9]
- Float_t **out3** [24]
- Float_t **tr_val__** [10]

6.29.1 Member Data Documentation

6.29.1.1 Float_t tr99_1_NEW::a[10]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::fill_(), and TTriggerReweight::trig_corr__().

6.29.1.2 Float_t tr99_1_NEW::b[10]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::fill_(), and TTriggerReweight::trig_corr__().

6.29.1.3 Float_t tr99_1_NEW::c__[10]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::fill_(), and TTriggerReweight::trig_corr__().

6.29.1.4 Float_t tr99_1_NEW::gbins[9]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::CCTriggerEff(), TTriggerReweight::inter_(), and TTriggerReweight::trig_corr__().

6.29.1.5 Float_t tr99_1_NEW::out3[24]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::CCTriggerEff(), TTriggerReweight::fill_(), and TTriggerReweight::inter_().

6.29.1.6 Float_t tr99_1_NEW::tr_val__[10]

Definition at line 30 of file TTriggerReweight.h.

Referenced by TTriggerReweight::inter_(), and TTriggerReweight::trig_corr__().

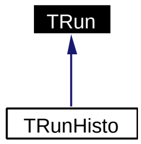
The documentation for this struct was generated from the following file:

- **TTriggerReweight.h**

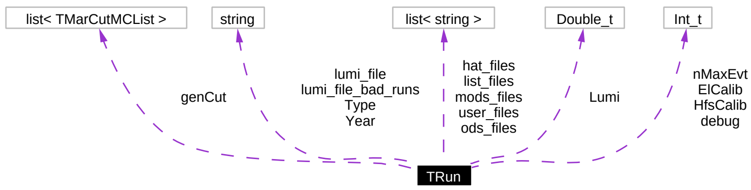
6.30 TRun Class Reference

`#include <TRun.h>`

Inheritance diagram for TRun:



Collaboration diagram for TRun:



Public Member Functions

- **TRun** (string par_file)
- ~**TRun** ()

Public Attributes

- Int_t **debug**
- Int_t **nMaxEvt**
- list< **TMarCutMCList** > **genCut**
- string **Type**
- string **Year**
- Int_t **HfsCalib**
- Int_t **ElCalib**
- Double_t **Lumi**
- list< string > **list_files**
- list< string > **hat_files**
- list< string > **mods_files**
- list< string > **ods_files**
- list< string > **user_files**
- string **lumi_file**
- string **lumi_file_bad_runs**

6.30.1 Constructor & Destructor Documentation

6.30.1.1 TRun::TRun (string *par_file*)

Definition at line 15 of file TRun.C.

References debug, ElCalib, genCut, hat_files, HfsCalib, list_files, Lumi, lumi_file, lumi_file_bad_runs, mods_files, nMaxEvt, ods_files, Type, user_files, and Year.

6.30.1.2 TRun::~TRun ()

Definition at line 191 of file TRun.C.

6.30.2 Member Data Documentation

6.30.2.1 Int_t TRun::debug

Definition at line 45 of file TRun.h.

Referenced by ClassImp(), THisto::THisto(), and TRun().

6.30.2.2 Int_t TRun::nMaxEvt

Definition at line 48 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.3 list<TMarCutMCList> TRun::genCut

Definition at line 51 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.4 string TRun::Type

Definition at line 54 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.5 string TRun::Year

Definition at line 57 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.6 Int_t TRun::HfsCalib

Definition at line 60 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.7 Int_t TRun::ElCalib

Definition at line 61 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.8 Double_t TRun::Lumi

Definition at line 64 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.9 list<string> TRun::list_files

Definition at line 67 of file TRun.h.

Referenced by TRun().

6.30.2.10 list<string> TRun::hat_files

Definition at line 70 of file TRun.h.

Referenced by TRun().

6.30.2.11 list<string> TRun::mods_files

Definition at line 73 of file TRun.h.

Referenced by TRun().

6.30.2.12 list<string> TRun::ods_files

Definition at line 76 of file TRun.h.

Referenced by TRun().

6.30.2.13 list<string> TRun::user_files

Definition at line 79 of file TRun.h.

Referenced by TRun().

6.30.2.14 string TRun::lumi_file

Reimplemented in **TRunHisto** (p. 144).

Definition at line 82 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

6.30.2.15 string TRun::lumi_file_bad_runs

Definition at line 85 of file TRun.h.

Referenced by TMarEvent::TMarEvent(), and TRun().

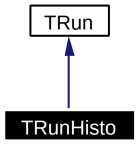
The documentation for this class was generated from the following files:

- **TRun.h**
- **TRun.C**

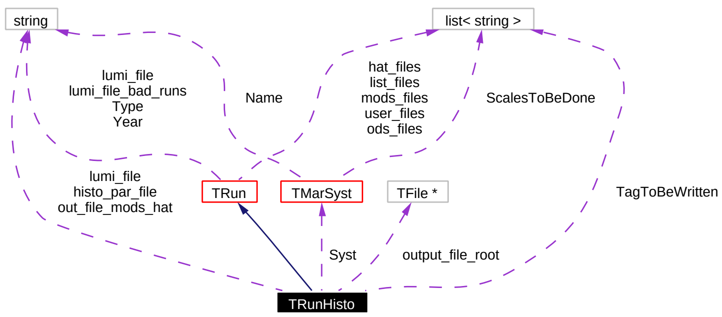
6.31 TRunHisto Class Reference

`#include <TRunHisto.h>`

Inheritance diagram for TRunHisto:



Collaboration diagram for TRunHisto:



Public Member Functions

- **TRunHisto** (string par_file)
- ~**TRunHisto** ()

Public Attributes

- list< string > **TagToBeWritten**
- **TMarSyst Syst**
- TFile ∗ **output_file_root**
- string **histo_par_file**
- string **lumi_file**
- string **out_file_mods_hat**

6.31.1 Constructor & Destructor Documentation

6.31.1.1 TRunHisto::TRunHisto (string *par_file*)

Definition at line 15 of file TRunHisto.C.

References histo_par_file, out_file_mods_hat, output_file_root, TMarSyst::ScalesToBeDone, Syst, and TagToBeWritten.

6.31.1.2 TRunHisto::~TRunHisto ()

Definition at line 143 of file TRunHisto.C.

References output_file_root.

6.31.2 Member Data Documentation

6.31.2.1 list<string> TRunHisto::TagToBeWritten

Definition at line 34 of file TRunHisto.h.

Referenced by ClassImp(), THisto::THisto(), and TRunHisto().

6.31.2.2 TMarSyst TRunHisto::Syst

Definition at line 38 of file TRunHisto.h.

Referenced by ClassImp(), TMarEvent::Next(), and TRunHisto().

6.31.2.3 TFile* TRunHisto::output_file_root

Definition at line 41 of file TRunHisto.h.

Referenced by ClassImp(), TMarEvent::Next(), THisto::THisto(), TRunHisto(), and ~TRunHisto().

6.31.2.4 string TRunHisto::histo_par_file

Definition at line 45 of file TRunHisto.h.

Referenced by ClassImp(), THisto::THisto(), and TRunHisto().

6.31.2.5 string TRunHisto::lumi_file

Reimplemented from **TRun** (p. 141).

Definition at line 48 of file TRunHisto.h.

6.31.2.6 string TRunHisto::out_file_mods_hat

Definition at line 51 of file TRunHisto.h.

Referenced by ClassImp(), THisto::THisto(), and TRunHisto().

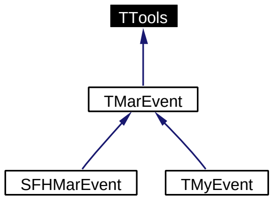
The documentation for this class was generated from the following files:

- **TRunHisto.h**
- **TRunHisto.C**

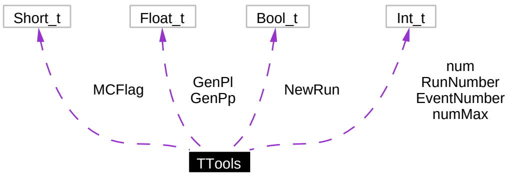
6.32 TTools Class Reference

`#include <TTools.h>`

Inheritance diagram for TTools:



Collaboration diagram for TTools:



Public Member Functions

- **TTools** ()
- **TTools** (Int_t Run, Int_t Event, Int_t **MCFlag**)
- virtual Bool_t **Next** ()
- void **SetEventList** (Char_t ∗ListFileName)
- Bool_t **IsData2005** (void)
- Bool_t **IsData2004e** (void)
- Bool_t **IsData2004p** (void)
- Bool_t **IsData0304R1** (void)
- Bool_t **IsData0304L1** (void)
- Bool_t **IsData0304L2** (void)
- Bool_t **IsData0304R2** (void)
- Bool_t **IsData2003** (void)
- Bool_t **IsData2002** (void)
- Bool_t **IsDataHeraII** (void)
- Bool_t **IsData2000** (void)
- Bool_t **IsData1999p** (void)
- Bool_t **IsData1999e** (void)
- Bool_t **IsData1998** (void)
- Bool_t **IsData1997** (void)
- Bool_t **IsData1996** (void)
- Bool_t **IsData1995** (void)
- Bool_t **IsData1994** (void)
- Bool_t **IsData94** (const UInt_t &irun)
- Bool_t **IsData95S** (const UInt_t &irun)

- Bool_t **IsData95P** (const UInt_t &irun)
- Bool_t **IsData96P** (const UInt_t &irun)
- Bool_t **IsData97P** (const UInt_t &irun)
- Bool_t **IsData97S** (const UInt_t &irun)
- Bool_t **IsData98E** (const UInt_t &irun)
- Bool_t **IsData99S** (const UInt_t &irun)
- Bool_t **IsData99E** (const UInt_t &irun)
- Bool_t **IsData99P** (const UInt_t &irun)
- Bool_t **IsData00S** (const UInt_t &irun)
- Bool_t **IsData00P** (const UInt_t &irun)
- Bool_t **IsL4Trigg** (Int_t iTrigg)
- Bool_t **IsL1Trigg** (Int_t iTrigg)
- Bool_t **IsL2TTTrigg** (Int_t iTrigg)
- Bool_t **IsHV** (void)
- Bool_t **IsHVCJCLoose** (void)
- Bool_t **IsCjcLooseOn** ()
- Bool_t **IsCipCopOn** ()
- Bool_t **IsCipOn** ()
- Bool_t **IsBdcOn** ()
- Bool_t **IsFmdOn** ()
- Bool_t **IsPlugOn** ()
- Bool_t **IsCosmic** (void)
- Bool_t **IsIbgBit** (Int_t iBit)
- Bool_t **IsCCCosmic** (void)
- Bool_t **IsNonEP** ()
- Bool_t **IsNonEP03** (void)
- Bool_t **IsEPzOK** (Float_t Epz)
- Bool_t **IsPhiCrack** (Float_t Phi)
- Bool_t **IsLArCrack** (Float_t z, Float_t phi)
- Bool_t **IsLArCrack** (Float_t z, Float_t zBBE, Float_t phi)
- Bool_t **IsZCrack** (Float_t z)
- Bool_t **IsTimingOk** ()
- Bool_t **Is2004CalibratedTimingOK** (void)
- Bool_t **IsCJCDead** (Float_t PhiTr)
- Bool_t **IsCJCMCDead** (Float_t PhiTr)
- Bool_t **IsMCQ2OK** (void)
- Bool_t **IsHVCaloCJC** (void)
- Float_t **abscor** (Int_t icalfac, Float_t theta_rad, Float_t ptj, Float_t qvar)
- Double_t **GetMod** (Double_t x, Double_t y)
- Double_t **GetRealPhi** (Double_t PhiIn)
- Double_t **GetMergedPhi** (Double_t PhiPart1, Double_t PtPart1, Double_t PhiPart2, Double_t PtPart2)
- Double_t **GetProjPhi** (Double_t Phi)
- Int_t **GetMuonGrade** (H1PartMuon ∗Muon)
- Bool_t **ReadNoiseRuns** (Char_t ∗InputFile)
- Float_t **qhadcor_98_00** (Int_t ITRA, Int_t ITYPE, Float_t jetpos, Float_t ptin, Float_t qvar)
- Float_t **qhadcor_98_00_trans** (Int_t ∗itra, Int_t ∗itype, Float_t ∗jetpos, Float_t ∗ptin, Float_t ∗qvar)

- void **CalcExtraPolTrack** (TVector3 XStart, H1PartSelTrack ∗Track, Float_t &XOut, Float_t &YOut, Float_t &ZOut, Float_t &ThTrOut, Float_t &PhTrOut)
- void **OctgXY** (Float_t ∗xl, Float_t phi, Int_t ic, Float_t rc, Float_t roctog, Float_t ∗xout, Int_t &iflag)
- Int_t **OctogonIntersection** (TVector3 ClusStart, Float_t Theta, Float_t Phi, Float_t RCurv, Float_t Zmin, Float_t Zmax, Float_t RBarr, TVector3 &XOut, Float_t &PhiOut)
- void **LinCir** (Float_t ∗xl, Float_t phi, Float_t ∗xc, Float_t rc, Float_t ∗xy1, Float_t ∗xy2, Int_t &iflag)

Public Attributes

- Int_t **num**
- Int_t **numMax**
- Int_t **RunNumber**
- Int_t **EventNumber**
- Bool_t **NewRun**
- Float_t **GenPl**
- Float_t **GenPp**
- Short_t **MCFlag**

6.32.1 Constructor & Destructor Documentation

6.32.1.1 TTools::TTools ()

Definition at line 20 of file TTools.C.

References EventNumber, GenPl, GenPp, MCFlag, NewRun, num, numMax, and RunNumber.

6.32.1.2 TTools::TTools (Int_t *Run*, Int_t *Event*, Int_t *MCFlag*)

Definition at line 32 of file TTools.C.

References EventNumber, GenPl, GenPp, NewRun, num, numMax, and RunNumber.

6.32.2 Member Function Documentation

6.32.2.1 Bool_t TTools::Next () `[virtual]`

Reimplemented in **TMyEvent** (p. 134).

Definition at line 44 of file TTools.C.

References EventNumber, MCFlag, NewRun, num, numMax, and RunNumber.

Referenced by TMyEvent::Next().

6.32.2.2 void TTools::SetEventList (Char_t ∗ *ListFileName*)

Definition at line 67 of file TTools.C.

6.32.2.3 Bool_t TTools::IsData2005 (void)

Definition at line 205 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.4 Bool_t TTools::IsData2004e (void)

Definition at line 218 of file TTools.C.

References MCFlag.

6.32.2.5 Bool_t TTools::IsData2004p (void)

Definition at line 276 of file TTools.C.

References MCFlag.

6.32.2.6 Bool_t TTools::IsData0304R1 (void)

Definition at line 232 of file TTools.C.

References MCFlag.

6.32.2.7 Bool_t TTools::IsData0304L1 (void)

Definition at line 243 of file TTools.C.

References MCFlag.

6.32.2.8 Bool_t TTools::IsData0304L2 (void)

Definition at line 253 of file TTools.C.

References MCFlag.

6.32.2.9 Bool_t TTools::IsData0304R2 (void)

Definition at line 264 of file TTools.C.

References MCFlag.

6.32.2.10 Bool_t TTools::IsData2003 (void)

Definition at line 289 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by IsHV(), IsTimingOk(), and main().

6.32.2.11 Bool_t TTools::IsData2002 (void)

Definition at line 315 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.12 Bool_t TTools::IsDataHeraII (void)

Definition at line 302 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by TMarEvent::CCTriggerEfficiency(), IsHVCJCLoose(), IsTimingOk(), TMarEvent::JJTriggerEfficiency(), and TMarEvent::MuTriggerEfficiency().

6.32.2.13 Bool_t TTools::IsData2000 (void)

Definition at line 329 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by TMarEvent::CCTriggerEfficiency().

6.32.2.14 Bool_t TTools::IsData1999p (void)

Definition at line 341 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by TMarEvent::CCTriggerEfficiency().

6.32.2.15 Bool_t TTools::IsData1999e (void)

Definition at line 353 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by TMarEvent::CCTriggerEfficiency().

6.32.2.16 Bool_t TTools::IsData1998 (void)

Definition at line 365 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by TMarEvent::CCTriggerEfficiency().

6.32.2.17 Bool_t TTools::IsData1997 (void)

Definition at line 377 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.18 Bool_t TTools::IsData1996 (void)

Definition at line 389 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.19 Bool_t TTools::IsData1995 (void)

Definition at line 401 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.20 Bool_t TTools::IsData1994 (void)

Definition at line 413 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.21 Bool_t TTools::IsData94 (const UInt_t & *irun*)

Definition at line 427 of file TTools.C.

6.32.2.22 Bool_t TTools::IsData95S (const UInt_t & *irun*)

Definition at line 432 of file TTools.C.

6.32.2.23 Bool_t TTools::IsData95P (const UInt_t & *irun*)

Definition at line 442 of file TTools.C.

6.32.2.24 Bool_t TTools::IsData96P (const UInt_t & *irun*)

Definition at line 452 of file TTools.C.

6.32.2.25 Bool_t TTools::IsData97P (const UInt_t & *irun*)

Definition at line 457 of file TTools.C.

6.32.2.26 Bool_t TTools::IsData97S (const UInt_t & *irun*)

Definition at line 462 of file TTools.C.

6.32.2.27 Bool_t TTools::IsData98E (const UInt_t & *irun*)

Definition at line 467 of file TTools.C.

6.32.2.28 Bool_t TTools::IsData99S (const UInt_t & *irun*)

Definition at line 473 of file TTools.C.

6.32.2.29 Bool_t TTools::IsData99E (const UInt_t & *irun*)

Definition at line 478 of file TTools.C.

6.32.2.30 Bool_t TTools::IsData99P (const UInt_t & *irun*)

Definition at line 484 of file TTools.C.

6.32.2.31 Bool_t TTools::IsData00S (const UInt_t & *irun*)

Definition at line 494 of file TTools.C.

6.32.2.32 Bool_t TTools::IsData00P (const UInt_t & *irun*)

Definition at line 499 of file TTools.C.

6.32.2.33 Bool_t TTools::IsL4Trigg (Int_t *iTrigg*)

Definition at line 878 of file TTools.C.

Referenced by TMarEvent::CCTriggerEfficiency(), and TMarEvent::JJTriggerEfficiency().

6.32.2.34 Bool_t TTools::IsL1Trigg (Int_t *iTrigg*)

Definition at line 890 of file TTools.C.

Referenced by TMarEvent::CCTriggerEfficiency(), and TMarEvent::MuTriggerEfficiency().

6.32.2.35 Bool_t TTools::IsL2TTTrigg (Int_t *iTrigg*)

Definition at line 902 of file TTools.C.

6.32.2.36 Bool_t TTools::IsHV (void)

Definition at line 516 of file TTools.C.

References IsData2003(), and MCFlag.

Referenced by main().

6.32.2.37 Bool_t TTools::IsHVCJCLoose (void)

Definition at line 556 of file TTools.C.

References IsDataHeraII(), and MCFlag.

6.32.2.38 Bool_t TTools::IsCjcLooseOn ()

Definition at line 680 of file TTools.C.

6.32.2.39 Bool_t TTools::IsCipCopOn ()

Definition at line 645 of file TTools.C.

References MCFlag.

6.32.2.40 Bool_t TTools::IsCipOn ()

Definition at line 660 of file TTools.C.

References MCFlag.

6.32.2.41 Bool_t TTools::IsBdcOn ()

Definition at line 597 of file TTools.C.

References MCFlag.

6.32.2.42 Bool_t TTools::IsFmdOn ()

Definition at line 612 of file TTools.C.

References MCFlag.

6.32.2.43 Bool_t TTools::IsPlugOn ()

Definition at line 627 of file TTools.C.

References MCFlag.

6.32.2.44 Bool_t TTools::IsCosmic (void)

Definition at line 835 of file TTools.C.

Referenced by THisto::Cut(), and main().

6.32.2.45 Bool_t TTools::IsIbgBit (Int_t *iBit*)

Definition at line 864 of file TTools.C.

6.32.2.46 Bool_t TTools::IsCCCosmic (void)

Definition at line 1180 of file TTools.C.

6.32.2.47 Bool_t TTools::IsNonEP ()

Definition at line 1300 of file TTools.C.

References EventNumber, MCFlag, and RunNumber.

6.32.2.48 Bool_t TTools::IsNonEP03 (void)

Definition at line 1226 of file TTools.C.

References EventNumber, and RunNumber.

6.32.2.49 Bool_t TTools::IsEPzOK (Float_t *Epz*)

Definition at line 2094 of file TTools.C.

6.32.2.50 Bool_t TTools::IsPhiCrack (Float_t *Phi*)

Definition at line 724 of file TTools.C.

6.32.2.51 Bool_t TTools::IsLArCrack (Float_t *z*, Float_t *phi*)

Definition at line 753 of file TTools.C.

References GetMod(), and MYR2D.

6.32.2.52 Bool_t TTools::IsLArCrack (Float_t *z*, Float_t *zBBE*, Float_t *phi*)

Definition at line 777 of file TTools.C.

References GetMod(), and MYR2D.

6.32.2.53 Bool_t TTools::IsZCrack (Float_t *z*)

Definition at line 697 of file TTools.C.

6.32.2.54 Bool_t TTools::IsTimingOk ()

Definition at line 989 of file TTools.C.

References Is2004CalibratedTimingOK(), IsData2003(), IsDataHeraII(), MCFlag, and RunNumber.

Referenced by TMarEvent::ApplyCCBackgroundCuts(), and main().

6.32.2.55 Bool_t TTools::Is2004CalibratedTimingOK (void)

Definition at line 916 of file TTools.C.

References MCFlag, and RunNumber.

Referenced by IsTimingOk(), and TimimgCut::operator()().

6.32.2.56 Bool_t TTools::IsCJCDead (Float_t *PhiTr*)

Definition at line 2031 of file TTools.C.

References MCFlag, and RunNumber.

6.32.2.57 Bool_t TTools::IsCJCMCDead (Float_t *PhiTr*)

Definition at line 2080 of file TTools.C.

6.32.2.58 Bool_t TTools::IsMCQ2OK (void)

Definition at line 2236 of file TTools.C.

References MCFlag, and MCRAPGAPNCID.

6.32.2.59 Bool_t TTools::IsHVCaloCJC (void)

Definition at line 811 of file TTools.C.

References MCFlag.

6.32.2.60 Float_t TTools::abscor (Int_t *icalfac*, Float_t *theta_rad*, Float_t *ptj*, Float_t *qvar*)

Definition at line 2258 of file TTools.C.

References qhadcor_98_00_trans(), and RunNumber.

6.32.2.61 Double_t TTools::GetMod (Double_t *x*, Double_t *y*)

Definition at line 96 of file TTools.C.

Referenced by GetRealPhi(), and IsLArCrack().

6.32.2.62 Double_t TTools::GetRealPhi (Double_t *PhiIn*)

Definition at line 102 of file TTools.C.

References GetMod().

Referenced by TMarEvent::FindElePho(), TMarEvent::FindJet(), and GetMergedPhi().

6.32.2.63 Double_t TTools::GetMergedPhi (Double_t *PhiPart1*, Double_t *PtPart1*, Double_t *PhiPart2*, Double_t *PtPart2*)

Definition at line 119 of file TTools.C.

References GetRealPhi().

6.32.2.64 Double_t TTools::GetProjPhi (Double_t *Phi*)

Definition at line 135 of file TTools.C.

References MYR2D.

6.32.2.65 Int_t TTools::GetMuonGrade (H1PartMuon * *Muon*)

Definition at line 192 of file TTools.C.

6.32.2.66 Bool_t TTools::ReadNoiseRuns (Char_t * *InputFile*)

Definition at line 2599 of file TTools.C.

6.32.2.67 Float_t TTools::qhadcor_98_00 (Int_t *ITRA*, Int_t *ITYPE*, Float_t *jetpos*, Float_t *ptin*, Float_t *qvar*)

Definition at line 2107 of file TTools.C.

6.32.2.68 Float_t TTools::qhadcor_98_00_trans (Int_t * *itra*, Int_t * *itype*, Float_t * *jetpos*, Float_t * *ptin*, Float_t * *qvar*)

Definition at line 2293 of file TTools.C.

Referenced by abscor().

6.32.2.69 void TTools::CalcExtraPolTrack (TVector3 *XStart*, H1PartSelTrack * *Track*, Float_t & *XOut*, Float_t & *YOut*, Float_t & *ZOut*, Float_t & *ThTrOut*, Float_t & *PhTrOut*)

Definition at line 2945 of file TTools.C.

References BFIELDCONST, BFIELDNOM, OctogonIntersection(), rCalo, zBACKDET, z-EDBBE, and zIF1.

Referenced by TMarEvent::CalcDistDTNV(), and TMarEvent::CalcDistTracks().

6.32.2.70 void TTools::OctgXY (Float_t * *xl*, Float_t *phi*, Int_t *ic*, Float_t *rc*, Float_t *roctog*, Float_t * *xout*, Int_t & *iflag*)

Definition at line 2772 of file TTools.C.

References LinCir().

Referenced by OctogonIntersection().

6.32.2.71 Int_t TTools::OctogonIntersection (TVector3 *ClusStart*, Float_t *Theta*, Float_t *Phi*, Float_t *RCurv*, Float_t *Zmin*, Float_t *Zmax*, Float_t *RBarr*, TVector3 & *XOut*, Float_t & *PhiOut*)

Definition at line 2644 of file TTools.C.

References OctgXY().

Referenced by CalcExtraPolTrack().

6.32.2.72 void TTools::LinCir (Float_t * *xl*, Float_t *phi*, Float_t * *xc*, Float_t *rc*, Float_t * *xy1*, Float_t * *xy2*, Int_t & *iflag*)

Definition at line 2882 of file TTools.C.

Referenced by OctgXY().

6.32.3 Member Data Documentation

6.32.3.1 Int_t TTools::num

Definition at line 62 of file TTools.h.

Referenced by THisto::FillLumi(), TMarEvent::Init(), main(), TMarEvent::MCGenSelection(), Next(), and TTools().

6.32.3.2 Int_t TTools::numMax

Definition at line 63 of file TTools.h.

Referenced by TMarEvent::Init(), Next(), TMarEvent::TMarEvent(), and TTools().

6.32.3.3 Int_t TTools::RunNumber

Definition at line 65 of file TTools.h.

Referenced by abscor(), TMarEvent::Init(), Is2004CalibratedTimingOK(), IsCJCDead(), IsData1994(), IsData1995(), IsData1996(), IsData1997(), IsData1998(), IsData1999e(), IsData1999p(), IsData2000(), IsData2002(), IsData2003(), IsData2005(), IsDataHeraII(), IsNonEP(), IsNonEP03(), IsTimingOk(), Next(), THisto::Print(), TMarEvent::PrintEventInfo(), and TTools().

6.32.3.4 Int_t TTools::EventNumber

Definition at line 66 of file TTools.h.

Referenced by TMarEvent::Init(), IsNonEP(), IsNonEP03(), Next(), THisto::Print(), TMarEvent::PrintEventInfo(), and TTools().

6.32.3.5 Bool_t TTools::NewRun

Definition at line 67 of file TTools.h.

Referenced by THisto::FillLumi(), TMarEvent::Init(), Next(), and TTools().

6.32.3.6 Float_t TTools::GenPl

Definition at line 68 of file TTools.h.

Referenced by TMarEvent::ApplyMCXSectionReweight(), TMarEvent::CalculateDerivedVariables(), TMarEvent::FillFromHat(), TMarEvent::MCGenSelection(), and TTools().

6.32.3.7 Float_t TTools::GenPp

Definition at line 69 of file TTools.h.

Referenced by TMarEvent::ApplyMCXSectionReweight(), TMarEvent::CalculateDerivedVariables(), TMarEvent::FillFromHat(), TMarEvent::MCGenSelection(), and TTools().

6.32.3.8 Short_t TTools::MCFlag

Definition at line 70 of file TTools.h.

Referenced by TMarEvent::ApplyCCBackgroundCuts(), TMarEvent::CCTriggerEfficiency(), TMarEvent::DefineInputParticles(), TMarEvent::FillFromHat(), TMarEvent::FillGeneratedParticlesAndCut(), TMarEvent::Init(), Is2004CalibratedTimingOK(), IsBdcOn(), IsCipCopOn(), IsCipOn(), IsCJCDead(), IsData0304L1(), IsData0304L2(), IsData0304R1(), IsData0304R2(), IsData1994(), IsData1995(), IsData1996(), IsData1997(), IsData1998(), IsData1999e(), IsData1999p(), IsData2000(), IsData2002(), IsData2003(), IsData2004e(), IsData2004p(), IsData2005(), IsDataHeraII(), IsFmdOn(), IsHV(), IsHVCaloCJC(), IsHVCJCLoose(), IsMCQ2OK(), IsNonEP(), IsPlugOn(), IsTimingOk(), TMarEvent::JJTriggerEfficiency(), main(), TMarEvent::MuTriggerEfficiency(), Next(), and TTools().

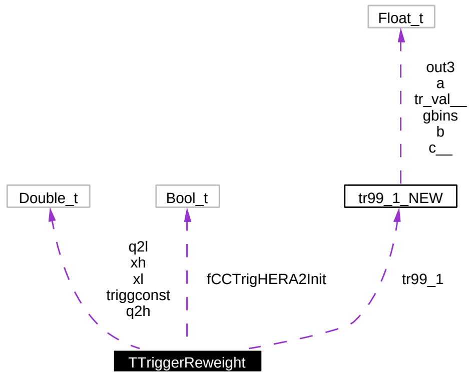
The documentation for this class was generated from the following files:

- **TTools.h**
- **TTools.C**

6.33 TTriggerReweight Class Reference

`#include <TTriggerReweight.h>`

Collaboration diagram for TTriggerReweight:



Public Member Functions

- Float_t **CCTriggerEff** (Float_t Pth, Float_t Thh, Int_t RunPeriod)
- Float_t **ApplyCCTRIGGEFFreweightHERA2** (Float_t xhadrons, Float_t Q2hadrons)
- Float_t **DiJetsTriggerEff** (Float_t PtJet1, Float_t ThetaJet1, Int_t RunPeriod=5)
- **TTriggerReweight** ()

Private Member Functions

- Float_t **trig_corr__** (Float_t *pet, Float_t *gar, Int_t *iyr)
- Float_t **trigeff_9899__** (Float_t *x, Float_t *y, Int_t *imeth, Int_t *iyear)
- Int_t **fill_** (Int_t *sel, Int_t *iyr)
- Int_t **inter_** (Int_t *g1, Int_t *g2, Float_t *gar, Float_t *pet, Int_t *sel, Int_t *iyr)
- void **SetTriggEffTable** ()

Private Attributes

- **tr99_1_NEW tr99_1**
- Bool_t **fCCTrigHERA2Init**
- Double_t **triggconst** [8][8]
- Double_t **xl** [8]
- Double_t **xh** [8]
- Double_t **q2l** [8]
- Double_t **q2h** [8]

6.33.1 Constructor & Destructor Documentation

6.33.1.1 TTriggerReweight::TTriggerReweight ()

Definition at line 13 of file TTriggerReweight.C.

References fCCTrigHERA2Init.

6.33.2 Member Function Documentation

6.33.2.1 Float_t TTriggerReweight::trig_corr__ (Float_t * *pet*, Float_t * *gar*, Int_t * *iyr*) [private]

Definition at line 579 of file TTriggerReweight.C.

References tr99_1_NEW::a, tr99_1_NEW::b, tr99_1_NEW::c__, fill_(), tr99_1_NEW::gbins, inter_(), tr99_1, and tr99_1_NEW::tr_val__.

Referenced by CCTriggerEff().

6.33.2.2 Float_t TTriggerReweight::trigeff_9899__ (Float_t * *x*, Float_t * *y*, Int_t * *imeth*, Int_t * *iyear*) [private]

Definition at line 420 of file TTriggerReweight.C.

Referenced by CCTriggerEff().

6.33.2.3 Int_t TTriggerReweight::fill_ (Int_t * *sel*, Int_t * *iyr*) [private]

Definition at line 641 of file TTriggerReweight.C.

References tr99_1_NEW::a, tr99_1_NEW::b, tr99_1_NEW::c__, tr99_1_NEW::out3, and tr99_1.

Referenced by trig_corr__().

6.33.2.4 Int_t TTriggerReweight::inter_ (Int_t * *g1*, Int_t * *g2*, Float_t * *gar*, Float_t * *pet*, Int_t * *sel*, Int_t * *iyr*) [private]

Definition at line 654 of file TTriggerReweight.C.

References tr99_1_NEW::gbins, tr99_1_NEW::out3, tr99_1, and tr99_1_NEW::tr_val__.

Referenced by trig_corr__().

6.33.2.5 void TTriggerReweight::SetTriggEffTable () [private]

Definition at line 303 of file TTriggerReweight.C.

References q2h, q2l, triggconst, xh, and xl.

Referenced by ApplyCCTRIGGEFFreweightHERA2().

6.33.2.6 Float_t TTriggerReweight::CCTriggerEff (Float_t *Pth*, Float_t *Thh*, Int_t *RunPeriod*)

Definition at line 168 of file TTriggerReweight.C.

References tr99_1_NEW::gbins, MYR2D, tr99_1_NEW::out3, tr99_1, trig_corr__(), and trigeff_9899__().

Referenced by TMarEvent::CCTriggerEfficiency().

6.33.2.7 Float_t TTriggerReweight::ApplyCCTRIGGEFFreweightHERA2 (Float_t *xhadrons*, Float_t *Q2hadrons*)

Definition at line 227 of file TTriggerReweight.C.

References fCCTrigHERA2Init, q2h, q2l, SetTriggEffTable(), triggconst, xh, and xl.

Referenced by TMarEvent::CCTriggerEfficiency().

6.33.2.8 Float_t TTriggerReweight::DiJetsTriggerEff (Float_t *PtJet1*, Float_t *ThetaJet1*, Int_t *RunPeriod* = 5)

Definition at line 22 of file TTriggerReweight.C.

References MYR2D.

Referenced by TMarEvent::JJTriggerEfficiency().

6.33.3 Member Data Documentation

6.33.3.1 tr99_1_NEW TTriggerReweight::tr99_1 `[private]`

Definition at line 44 of file TTriggerReweight.h.

Referenced by CCTriggerEff(), fill_(), inter_(), and trig_corr__().

6.33.3.2 Bool_t TTriggerReweight::fCCTrigHERA2Init `[private]`

Definition at line 53 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and TTriggerReweight().

6.33.3.3 Double_t TTriggerReweight::triggconst[8][8] `[private]`

Definition at line 54 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and SetTriggEffTable().

6.33.3.4 Double_t TTriggerReweight::xl[8] `[private]`

Definition at line 55 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and SetTriggEffTable().

6.33.3.5 Double_t TTriggerReweight::xh[8] `[private]`

Definition at line 56 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and SetTriggEffTable().

6.33.3.6 Double_t TTriggerReweight::q2l[8] `[private]`

Definition at line 57 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and SetTriggEffTable().

6.33.3.7 Double_t TTriggerReweight::q2h[8] [private]

Definition at line 58 of file TTriggerReweight.h.

Referenced by ApplyCCTRIGGEFFreweightHERA2(), and SetTriggEffTable().

The documentation for this class was generated from the following files:

- **TTriggerReweight.h**
- **TTriggerReweight.C**

Chapter 7

SFHMarana File Documentation

7.1 Funs.h File Reference

7.1.1 Detailed Description

Declares all Cuts, Event Funs and Iterators for J/psi analysis.

Changelog:

- 4.6.05 BL: Adapted functions to new name scheme (name in NamedO)
- 5.6.05 BL: Bugs removed

Definition in file **Funs.h**.

`#include "jbltools/sfh/FillIterator.h"`

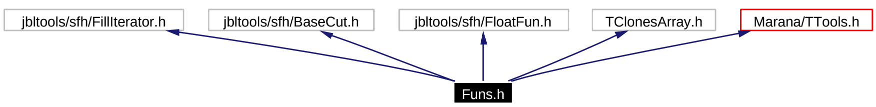
`#include "jbltools/sfh/BaseCut.h"`

`#include "jbltools/sfh/FloatFun.h"`

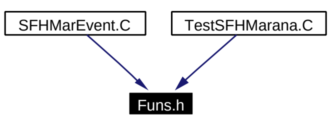
`#include <TClonesArray.h>`

`#include "Marana/TTools.h"`

Include dependency graph for Funs.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **NSelJetsFun**

  FloatFun *returning number of selected jets from* **TMarEvent**.

- class **PtSelJet1Fun**

  FloatFun *returning highest pt selected jets from* **TMarEvent**.

- class **ThSelJet1Fun**

  FloatFun *returning theta of highest pt selected jet from* **TMarEvent**.

- class **TimimgCut**

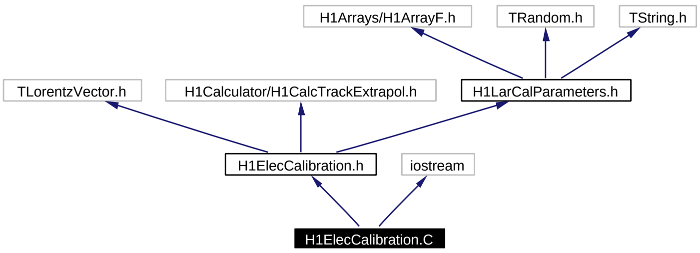
  FloatFun *returning theta of highest pt selected jet from* **TMarEvent**.

7.2 H1ElecCalibration.C File Reference

`#include "H1ElecCalibration.h"`

`#include <iostream>`

Include dependency graph for H1ElecCalibration.C:



Functions

- **ClassImp** (**H1ElecCalibration**) **H1ElecCalibration**

7.2.1 Function Documentation

7.2.1.1 ClassImp (H1ElecCalibration)

Definition at line 34 of file H1ElecCalibration.C.

References H1ElecCalibration::bDoForwardWheelWiseCalibration, H1ElecCalibration::bDoResolutionSmearing, H1ElecCalibration::bDoStackWiseCalibration, H1ElecCalibration::bDoZimpactWiseCalibration, H1ElecCalibration::bUseTrackPhi, H1ElecCalibration::bUseTrackTheta, H1ElecCalibration::fCalibratedElectron, H1ElecCalibration::fCalibration, H1ElecCalibration::fCharge, H1ElecCalibration::fElectronCluster, H1ElecCalibration::fElectronPhi, H1ElecCalibration::fElectronTheta, H1ElecCalibration::fElectronTrack, H1ElecCalibration::fExtrapol, and H1ElecCalibration::fLinkedTrackType.

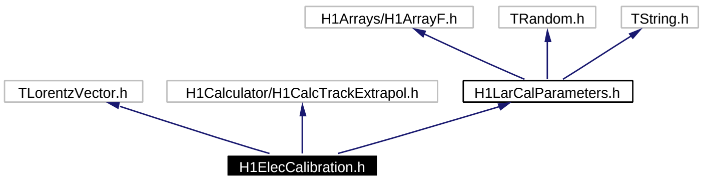
7.3 H1ElecCalibration.h File Reference

`#include <TLorentzVector.h>`

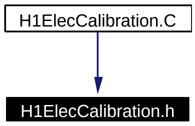
`#include "H1Calculator/H1CalcTrackExtrapol.h"`

`#include "H1LarCalParameters.h"`

Include dependency graph for H1ElecCalibration.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **H1ElecCalibration**

7.4 H1LarCalParameters.C File Reference

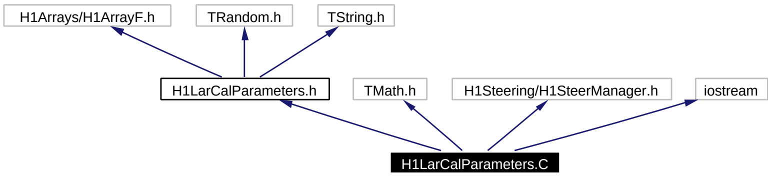
`#include "H1LarCalParameters.h"`

`#include "TMath.h"`

`#include "H1Steering/H1SteerManager.h"`

`#include <iostream>`

Include dependency graph for H1LarCalParameters.C:



Functions

- **ClassImp** (**H1LarCalParameters**) **H1LarCalParameters**

7.4.1 Function Documentation

7.4.1.1 ClassImp (H1LarCalParameters)

Definition at line 34 of file H1LarCalParameters.C.

References H1LarCalParameters::fDataSet, H1LarCalParameters::fEnergyResolutionConstantsData, H1LarCalParameters::fEnergyResolutionConstantsMC, H1LarCalParameters::fForwardWheelCalibrationFactor, H1LarCalParameters::fForwardWheelConstants, H1LarCalParameters::fOctantCalibrationFactor, H1LarCalParameters::fOctantConstants, H1LarCalParameters::fRandom, H1LarCalParameters::fResolutionSmearingFactor, H1LarCalParameters::fRunPeriod, H1LarCalParameters::fRunPeriodName, H1LarCalParameters::fZimpactCalibrationFactor, H1LarCalParameters::fZimpactConstants, and H1LarCalParameters::Reset().

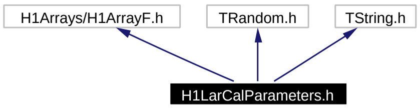
7.5 H1LarCalParameters.h File Reference

`#include "H1Arrays/H1ArrayF.h"`

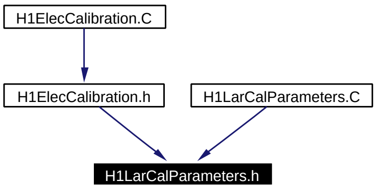
`#include <TRandom.h>`

`#include <TString.h>`

Include dependency graph for H1LarCalParameters.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **H1LarCalParameters**

7.6 JpsiMods.C File Reference

`#include <cstdio>`

`#include <cstdlib>`

`#include <iostream>`

`#include <fstream>`

`#include "SFHMarana/SFHMarEvent.h"`

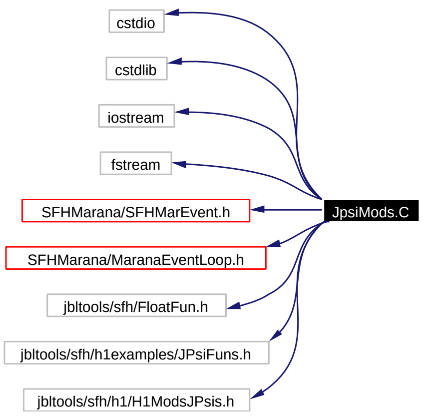
`#include "SFHMarana/MaranaEventLoop.h"`

`#include "jbltools/sfh/FloatFun.h"`

`#include "jbltools/sfh/h1examples/JPsiFuns.h"`

`#include "jbltools/sfh/h1/H1ModsJPsis.h"`

Include dependency graph for JpsiMods.C:



Functions

- TROOT **the_root** ("EXEMPLE","Exemple analysis")
- int **main** (int argc, char ∗argv[])

7.6.1 Function Documentation

7.6.1.1 TROOT the_root ("EXEMPLE", "Exemple analysis")

7.6.1.2 int main (int *argc*, char ∗ *argv*[])

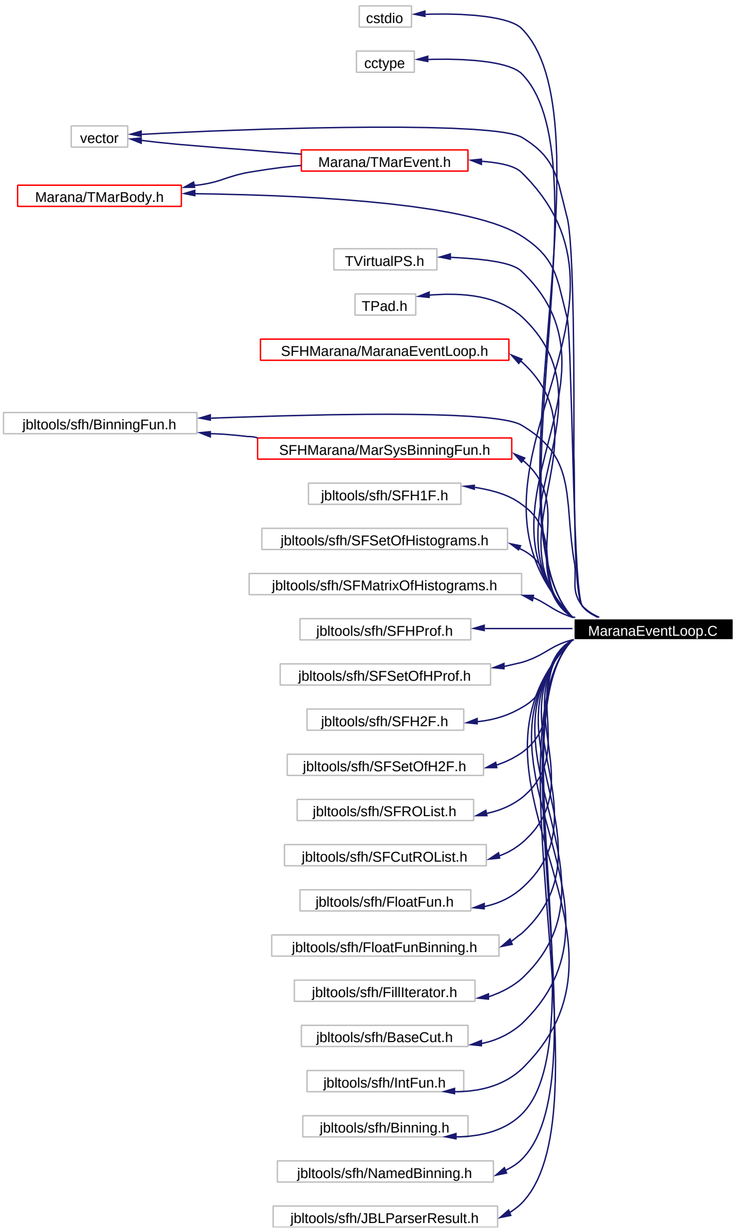
Definition at line 33 of file JpsiMods.C.

References TMarEvent::DTrTrMinMu, MaranaEventLoop::Fill(), TMarEvent::find_ElePho, TMarEvent::find_Jet, TMarEvent::find_Muon, TMarEvent::find_NP, TTools::IsCosmic(), TTools::IsData2003(), TTools::IsHV(), TTools::IsTimingOk(), TTools::MCFlag, TMarEvent::Next(), TTools::num, TMarEvent::PtMinEle, TMarEvent::PtMinMu, TMarEvent::ThetaMaxEle, TMarEvent::ThetaMaxMu, TMarEvent::ThetaMinEle, TMarEvent::ThetaMinMu, and TMarEvent::Vertex.

7.7 MaranaEventLoop.C File Reference

```
#include <cstdio>
#include <cctype>
#include <vector>
#include <TVirtualPS.h>
#include <TPad.h>
#include "Marana/TMarEvent.h"
#include "Marana/TMarBody.h"
#include "SFHMarana/MaranaEventLoop.h"
#include "SFHMarana/MarSysBinningFun.h"
#include "jbltools/sfh/SFH1F.h"
#include "jbltools/sfh/SFSetOfHistograms.h"
#include "jbltools/sfh/SFMatrixOfHistograms.h"
#include "jbltools/sfh/SFHProf.h"
#include "jbltools/sfh/SFSetOfHProf.h"
#include "jbltools/sfh/SFH2F.h"
#include "jbltools/sfh/SFSetOfH2F.h"
#include "jbltools/sfh/SFROList.h"
#include "jbltools/sfh/SFCutROList.h"
#include "jbltools/sfh/FloatFun.h"
#include "jbltools/sfh/BinningFun.h"
#include "jbltools/sfh/FloatFunBinning.h"
#include "jbltools/sfh/FillIterator.h"
#include "jbltools/sfh/BaseCut.h"
#include "jbltools/sfh/IntFun.h"
#include "jbltools/sfh/Binning.h"
#include "jbltools/sfh/NamedBinning.h"
#include "jbltools/sfh/JBLParserResult.h"
```

Include dependency graph for MaranaEventLoop.C:



Functions

- **ClassImp** (**MaranaEventLoop**) **MaranaEventLoop**

7.7.1 Function Documentation

7.7.1.1 ClassImp (MaranaEventLoop)

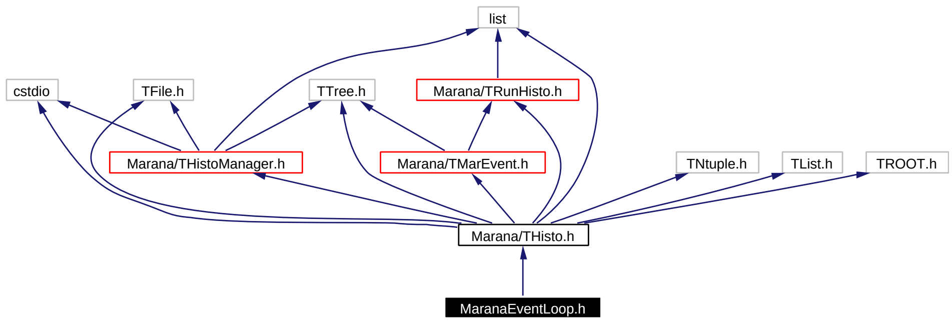
Definition at line 47 of file MaranaEventLoop.C.

References TRun::debug, THisto::debug, MaranaEventLoop::fillrolist, THisto::fp, THisto::hatCopy, TRunHisto::histo_par_file, THisto::modsCopy, THisto::NumEve, THisto::NumSelEve, THisto::NumSelEvePerRun, THisto::NumSelEvePerRunOld, TRunHisto::out_file_mods_hat, TRunHisto::output_file_root, THistoManager::ReadParameters(), MaranaEventLoop::rolist, MaranaEventLoop::syscut, MaranaEventLoop::sysfun, TRunHisto::Syst, and TRunHisto::TagToBeWritten.

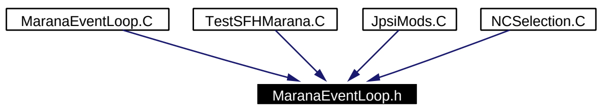
7.8 MaranaEventLoop.h File Reference

`#include "Marana/THisto.h"`

Include dependency graph for MaranaEventLoop.h:



This graph shows which files directly or indirectly include this file:



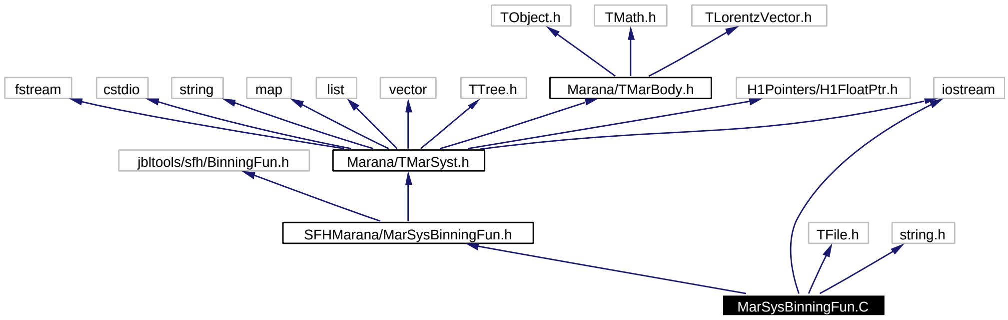
Compounds

- class **MaranaEventLoop**

7.9 MarSysBinningFun.C File Reference

```
#include "SFHMarana/MarSysBinningFun.h"
#include "TFile.h"
#include <iostream>
#include <string.h>
```

Include dependency graph for MarSysBinningFun.C:



7.10 MarSysBinningFun.h File Reference

7.10.1 Detailed Description

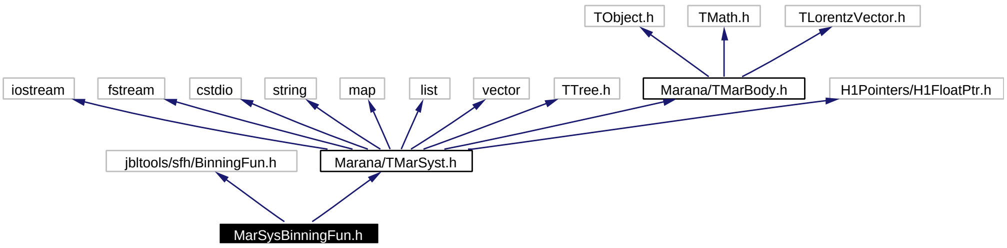
Declares class **MarSysBinningFun**.

Definition in file **MarSysBinningFun.h**.

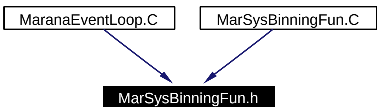
`#include "jbltools/sfh/BinningFun.h"`

`#include "Marana/TMarSyst.h"`

Include dependency graph for MarSysBinningFun.h:



This graph shows which files directly or indirectly include this file:



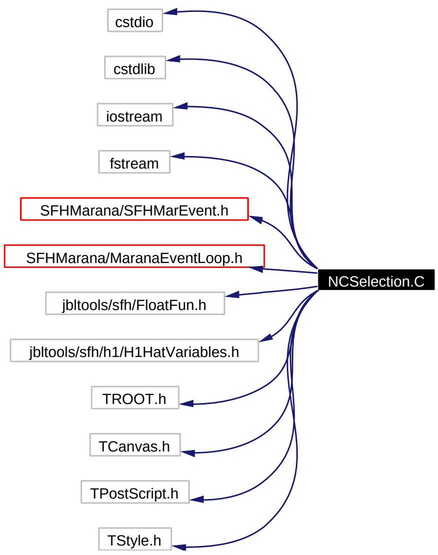
Compounds

- class **MarSysBinningFun**

7.11 NCSelection.C File Reference

```
#include <cstdio>
#include <cstdlib>
#include <iostream>
#include <fstream>
#include "SFHMarana/SFHMarEvent.h"
#include "SFHMarana/MaranaEventLoop.h"
#include "jbltools/sfh/FloatFun.h"
#include "jbltools/sfh/h1/H1HatVariables.h"
#include <TROOT.h>
#include <TCanvas.h>
#include <TPostScript.h>
#include <TStyle.h>
```

Include dependency graph for NCSelection.C:



Functions

- TROOT **the_root** ("EXEMPLE","Exemple analysis")
- int **main** (int argc, char ∗argv[])

7.11.1 Function Documentation

7.11.1.1 TROOT the_root ("EXEMPLE", "Exemple analysis")

7.11.1.2 int main (int *argc*, char * *argv*[ ])

Definition at line 36 of file NCSelection.C.

References MaranaEventLoop::Draw(), TMarEvent::DTrTrMinMu, MaranaEventLoop::Fill(), TMarEvent::find_ElePho, TMarEvent::find_Jet, TMarEvent::find_Muon, TMarEvent::find_NP, TTools::IsCosmic(), TTools::IsData2003(), TTools::IsHV(), TTools::IsTimingOk(), TTools::MCFlag, TMarEvent::Next(), TTools::num, TMarEvent::PtMinEle, TMarEvent::PtMinMu, TMarEvent::ThetaMaxEle, TMarEvent::ThetaMaxMu, TMarEvent::ThetaMinEle, TMarEvent::ThetaMinMu, and TMarEvent::Vertex.

7.12 SFHMarEvent.C File Reference

```
#include "SFHMarana/SFHMarEvent.h"
#include "SFHMarana/UserTreeParts.h"
#include "SFHMarana/Funs.h"
#include "Marana/TMarBody.h"
#include "jbltools/sfh/NTFloatFun.h"
#include "jbltools/sfh/FloatFun.h"
#include "jbltools/sfh/NTIntFun.h"
#include "jbltools/sfh/FillIterators.h"
#include "jbltools/sfh/h1/H1Funs.h"
#include "jbltools/sfh/h1/H1ModsJPsis.h"
#include "jbltools/sfh/h1/H1ModsEms.h"
#include "jbltools/sfh/h1/H1ModsMuons.h"
#include "jbltools/sfh/h1/H1ModsJets.h"
#include "jbltools/sfh/h1/H1ModsSelTracks.h"
#include "jbltools/sfh/h1/H1ModsMCs.h"
#include "jbltools/sfh/VectorIterator.h"
#include "H1Mods/H1PartJPsi.h"
#include "H1Mods/H1PartJPsiArrayPtr.h"
```

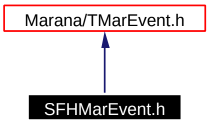
Include dependency graph for SFHMarEvent.C:


SFHMarana/SFHMarEvent.h
jbltools/sfh/h1/H1Funs.h
SFHMarana/UserTreeParts.h
jbltools/sfh/FloatFun.h
SFHMarana/Funs.h
Marana/TMarBody.h
jbltools/sfh/NTFloatFun.h
jbltools/sfh/NTIntFun.h
jbltools/sfh/FillIterators.h
SFHMarEvent.C
jbltools/sfh/h1/H1ModsJPsis.h
jbltools/sfh/h1/H1ModsEms.h
jbltools/sfh/h1/H1ModsMuons.h
jbltools/sfh/h1/H1ModsJets.h
jbltools/sfh/h1/H1ModsSelTracks.h
jbltools/sfh/h1/H1ModsMCs.h
jbltools/sfh/VectorIterator.h
H1Mods/H1PartJPsi.h
H1Mods/H1PartJPsiArrayPtr.h

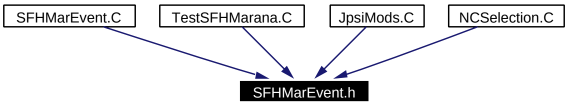
7.13 SFHMarEvent.h File Reference

`#include "Marana/TMarEvent.h"`

Include dependency graph for SFHMarEvent.h:



This graph shows which files directly or indirectly include this file:



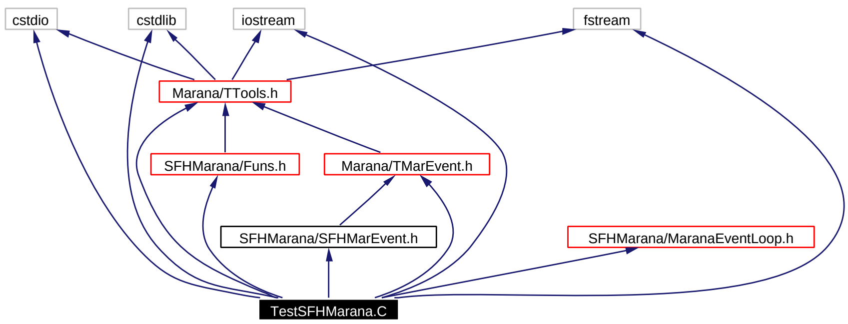
Compounds

- class **SFHMarEvent**

7.14 TestSFHMarana.C File Reference

```
#include <cstdio>
#include <cstdlib>
#include <iostream>
#include <fstream>
#include "SFHMarana/SFHMarEvent.h"
#include "SFHMarana/MaranaEventLoop.h"
#include "SFHMarana/Funs.h"
#include "Marana/TMarEvent.h"
#include "Marana/TTools.h"
```

Include dependency graph for TestSFHMarana.C:



Namespaces

- namespace **std**

Functions

- TROOT **the_root** ("EXEMPLE","Exemple analysis")
- int **main** (int argc, char *argv[])

7.14.1 Function Documentation

7.14.1.1 TROOT the_root ("EXEMPLE", "Exemple analysis")

7.14.1.2 int main (int *argc*, char * *argv*[])

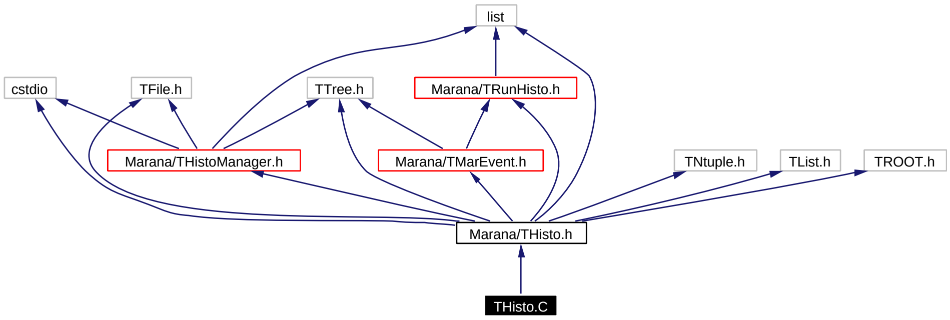
Definition at line 33 of file TestSFHMarana.C.

References TMarEvent::DTrTrMinMu, TMarEvent::EmFracJet, MaranaEventLoop::Fill(), TMarEvent::find_ElePho, TMarEvent::find_Jet, TMarEvent::find_Muon, TMarEvent::find_NP, TTools::IsCosmic(), TTools::IsData2003(), TTools::IsHV(), TTools::IsTimingOk(), TMarEvent::jet, TTools::MCFlag, TMarEvent::Next(), TTools::num, TMarEvent::PtMinEle, TMarEvent::PtMinJet, TMarEvent::PtMinMu, TMarEvent::RMinJet, TMarEvent::ThetaMaxEle, TMarEvent::ThetaMaxJet, TMarEvent::ThetaMaxMu, TMarEvent::ThetaMinEle, TMarEvent::ThetaMinJet, TMarEvent::ThetaMinMu, and TMarEvent::Vertex.

7.15 THisto.C File Reference

`#include "Marana/THisto.h"`

Include dependency graph for THisto.C:



Functions

- **ClassImp** (**THisto**) **THisto**

7.15.1 Function Documentation

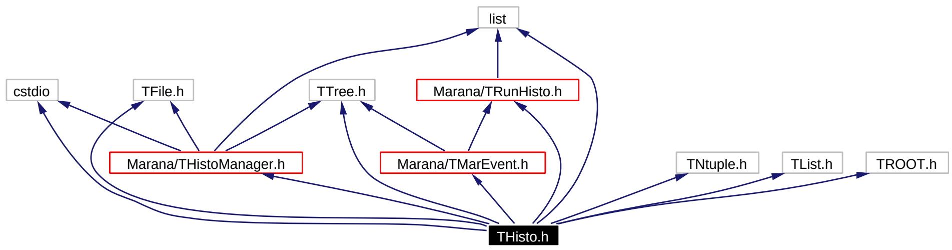
7.15.1.1 ClassImp (THisto)

Definition at line 16 of file THisto.C.

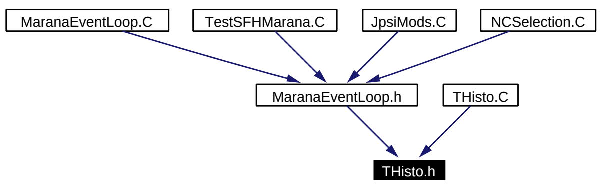
7.16 THisto.h File Reference

```
#include <cstdio>
#include <TFile.h>
#include <TTree.h>
#include <TNtuple.h>
#include <TList.h>
#include <TROOT.h>
#include <list>
#include "Marana/TMarEvent.h"
#include "Marana/THistoManager.h"
#include "Marana/TRunHisto.h"
```

Include dependency graph for THisto.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **THisto**

7.17 THistoManager.C File Reference

```
#include "Marana/THistoManager.h"
```

Include dependency graph for THistoManager.C:

7.18 THistoManager.h File Reference

`#include <sstream>`

`#include <cctype>`

`#include <cstdio>`

`#include <cstdlib>`

`#include <iostream>`

`#include <fstream>`

`#include <vector>`

`#include <string>`

`#include <list>`

`#include <TFile.h>`

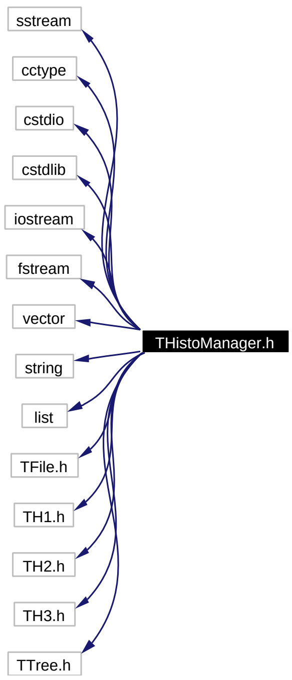
`#include <TH1.h>`

`#include <TH2.h>`

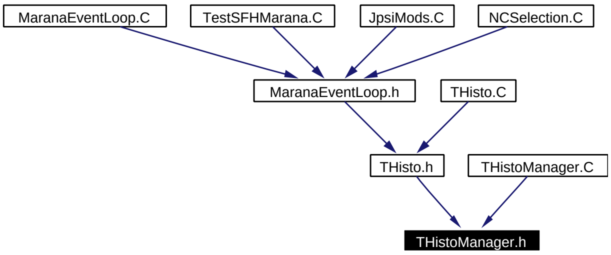
`#include <TH3.h>`

`#include <TTree.h>`

Include dependency graph for THistoManager.h:



This graph shows which files directly or indirectly include this file:



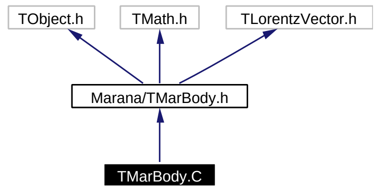
Compounds

- class **THistoManager**

7.19 TMarBody.C File Reference

`#include "Marana/TMarBody.h"`

Include dependency graph for TMarBody.C:



Functions

- **ClassImp** (**TMarBody**) **TMarBody**

7.19.1 Function Documentation

7.19.1.1 ClassImp (TMarBody)

Definition at line 18 of file TMarBody.C.

References TMarBody::fE, TMarBody::fEta, TMarBody::fIndex, TMarBody::fIndexID, TMarBody::fPhi, TMarBody::fPt, and TMarBody::fSelected.

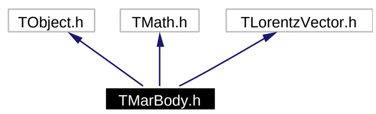
7.20 TMarBody.h File Reference

`#include <TObject.h>`

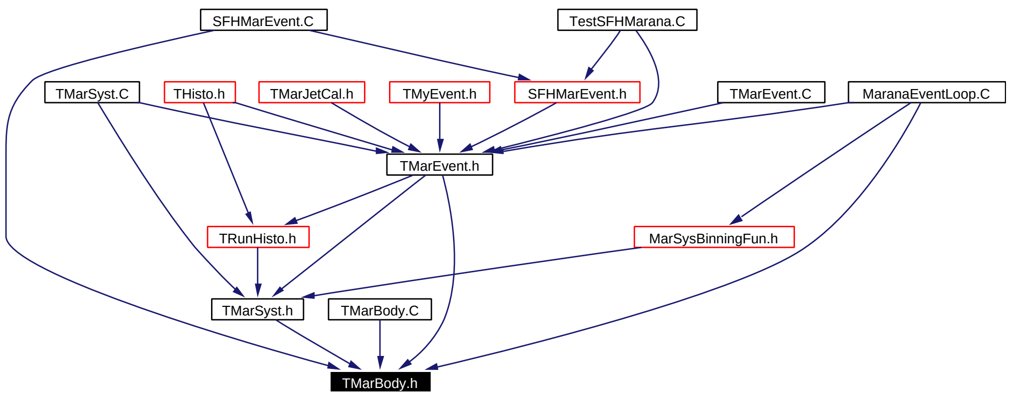
`#include <TMath.h>`

`#include <TLorentzVector.h>`

Include dependency graph for TMarBody.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TMarBody**

Defines

- #define **IDELE** 1
- #define **IDMU** 2
- #define **IDJET** 3
- #define **IDNP** 4
- #define **IDPHO** 5
- #define **IDHFS** 6
- #define **IDTRK** 7
- #define **IDTAU** 8
- #define **IDGELE** 11
- #define **IDGMU** 12
- #define **IDGJET** 13
- #define **IDGNP** 14
- #define **IDGPHO** 15
- #define **IDGTAU** 16
- #define **INDEXNP** -2

7.20.1 Define Documentation

7.20.1.1 #define IDELE 1

Definition at line 17 of file TMarBody.h.

Referenced by TMarEvent::DefineInputParticles(), and TMarEvent::FindElePho().

7.20.1.2 #define IDMU 2

Definition at line 18 of file TMarBody.h.

Referenced by TMarEvent::DefineInputParticles(), and TMarEvent::FindMuon().

7.20.1.3 #define IDJET 3

Definition at line 19 of file TMarBody.h.

Referenced by TMarEvent::ApplyHfsCalibration(), TMarEvent::ApplyLowQ2HfsCalibration(), TMarEvent::DefineInputParticles(), and TMarEvent::FindJet().

7.20.1.4 #define IDNP 4

Definition at line 20 of file TMarBody.h.

Referenced by TMarEvent::FindNP().

7.20.1.5 #define IDPHO 5

Definition at line 21 of file TMarBody.h.

Referenced by TMarEvent::FindElePho().

7.20.1.6 #define IDHFS 6

Definition at line 22 of file TMarBody.h.

7.20.1.7 #define IDTRK 7

Definition at line 23 of file TMarBody.h.

7.20.1.8 #define IDTAU 8

Definition at line 24 of file TMarBody.h.

7.20.1.9 #define IDGELE 11

Definition at line 27 of file TMarBody.h.

Referenced by TMarEvent::FindGeneratedParticles().

7.20.1.10 #define IDGMU 12

Definition at line 28 of file TMarBody.h.

Referenced by TMarEvent::FindGeneratedParticles().

7.20.1.11 #define IDGJET 13

Definition at line 29 of file TMarBody.h.

7.20.1.12 #define IDGNP 14

Definition at line 30 of file TMarBody.h.

7.20.1.13 #define IDGPHO 15

Definition at line 31 of file TMarBody.h.

7.20.1.14 #define IDGTAU 16

Definition at line 32 of file TMarBody.h.

Referenced by TMarEvent::FindGeneratedParticles().

7.20.1.15 #define INDEXNP -2

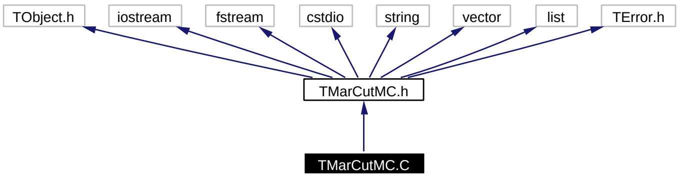
Definition at line 35 of file TMarBody.h.

Referenced by TMarEvent::FindNP().

7.21 TMarCutMC.C File Reference

`#include "TMarCutMC.h"`

Include dependency graph for TMarCutMC.C:



Functions

- istream & **operator**>> (istream &in, **TMarCutMC** &CutMC)
- ostream & **operator**<< (ostream &out, **TMarCutMC** &CutMC)
- istream & **operator**>> (istream &in, **TMarCutMCList** &List)
- ostream & **operator**<< (ostream &out, **TMarCutMCList** &List)

7.21.1 Function Documentation

7.21.1.1 istream& operator>> (istream & *in*, TMarCutMC & *CutMC*)

Definition at line 20 of file TMarCutMC.C.

References TMarCutMC::CutMax, TMarCutMC::CutMin, TMarCutMC::Variable, and TMarCutMC::Weight.

7.21.1.2 ostream& operator<< (ostream & *out*, TMarCutMC & *CutMC*)

Definition at line 76 of file TMarCutMC.C.

References TMarCutMC::CutMax, TMarCutMC::CutMin, TMarCutMC::Variable, and TMarCutMC::Weight.

7.21.1.3 istream& operator>> (istream & *in*, TMarCutMCList & *List*)

Definition at line 134 of file TMarCutMC.C.

References TMarCutMCList::CutList.

7.21.1.4 ostream& operator<< (ostream & *out*, TMarCutMCList & *List*)

Definition at line 156 of file TMarCutMC.C.

References TMarCutMCList::CutList.

7.22 TMarCutMC.h File Reference

#include <TObject.h>

#include <iostream>

#include <fstream>

#include <cstdio>

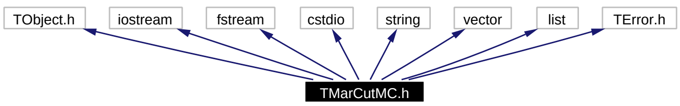
#include <string>

#include <vector>

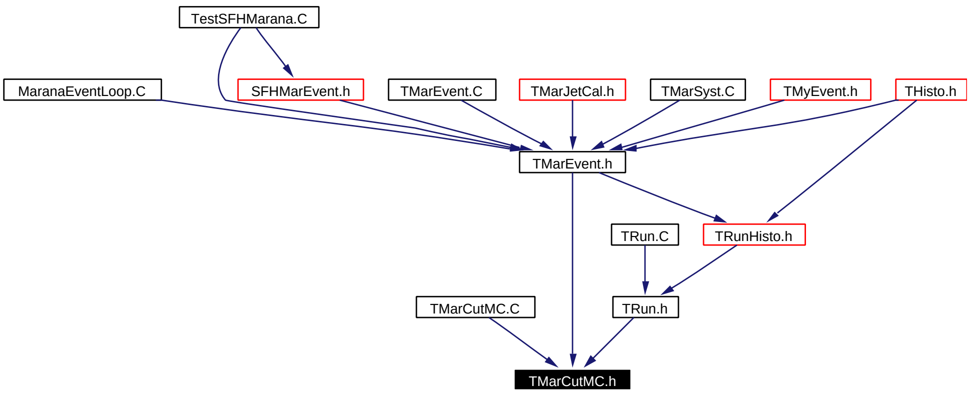
#include <list>

#include <TError.h>

Include dependency graph for TMarCutMC.h:



This graph shows which files directly or indirectly include this file:



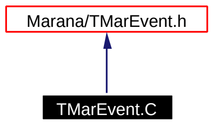
Compounds

- class **TMarCutMC**
- class **TMarCutMCList**

7.23 TMarEvent.C File Reference

`#include "Marana/TMarEvent.h"`

Include dependency graph for TMarEvent.C:



Defines

- #define **TMAREVENTDEBUG** 0

7.23.1 Define Documentation

7.23.1.1 #define TMAREVENTDEBUG 0

Definition at line 15 of file TMarEvent.C.

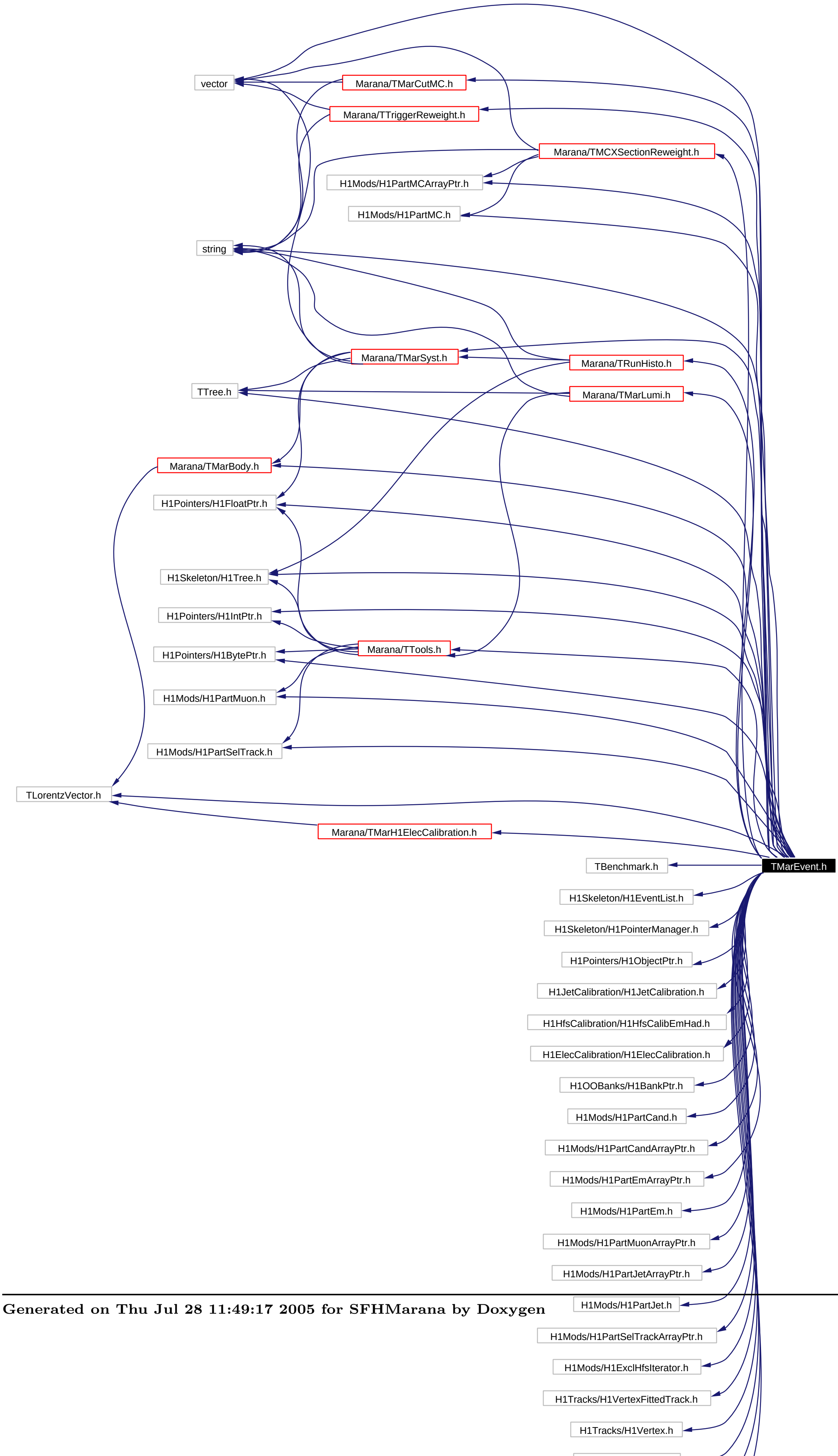
Referenced by TMarEvent::ApplySystematicShifts(), TMarEvent::CalculateDerivedVariables(), TMarEvent::FillGeneratedParticlesAndCut(), and TMarEvent::FindGeneratedParticles().

7.24 TMarEvent.h File Reference

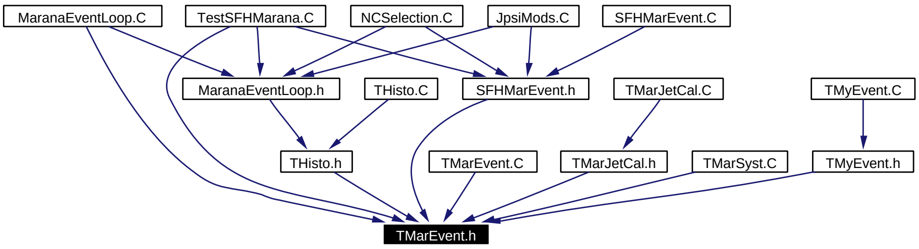
```
#include <string>
#include <vector>
#include <TTree.h>
#include <TBenchmark.h>
#include <TLorentzVector.h>
#include "H1Skeleton/H1Tree.h"
#include "H1Skeleton/H1EventList.h"
#include "H1Skeleton/H1PointerManager.h"
#include "H1Pointers/H1ObjectPtr.h"
#include "H1Pointers/H1FloatPtr.h"
#include "H1Pointers/H1IntPtr.h"
#include "H1Pointers/H1BytePtr.h"
#include "H1JetCalibration/H1JetCalibration.h"
#include "H1HfsCalibration/H1HfsCalibEmHad.h"
#include "Marana/TMarH1ElecCalibration.h"
#include "Marana/TTriggerReweight.h"
#include "Marana/TMCXSectionReweight.h"
#include "H1ElecCalibration/H1ElecCalibration.h"
#include "H1OOBanks/H1BankPtr.h"
#include "H1Mods/H1PartCand.h"
#include "H1Mods/H1PartCandArrayPtr.h"
#include "H1Mods/H1PartEmArrayPtr.h"
#include "H1Mods/H1PartEm.h"
#include "H1Mods/H1PartMuonArrayPtr.h"
#include "H1Mods/H1PartMuon.h"
#include "H1Mods/H1PartJetArrayPtr.h"
#include "H1Mods/H1PartJet.h"
#include "H1Mods/H1PartSelTrackArrayPtr.h"
#include "H1Mods/H1PartSelTrack.h"
#include "H1Mods/H1ExclHfsIterator.h"
#include "H1Mods/H1PartMCArrayPtr.h"
#include "H1Mods/H1PartMC.h"
#include "H1Tracks/H1VertexFittedTrack.h"
#include "H1Tracks/H1Vertex.h"
#include "H1Tracks/H1Track.h"
```

```
#include "H1Tracks/H1ReconstructedVertex.h"
#include "H1Steering/h1debug.h"
#include "Marana/TMarBody.h"
#include "Marana/TTools.h"
#include "Marana/TMarLumi.h"
#include "Marana/TRunHisto.h"
#include "Marana/TMarCutMC.h"
#include "Marana/TMarSyst.h"
```

Include dependency graph for TMarEvent.h:


vector
Marana/TMarCutMC.h
Marana/TTriggerReweight.h
Marana/TMCXSectionReweight.h
H1Mods/H1PartMCArrayPtr.h
H1Mods/H1PartMC.h
string
Marana/TMarSyst.h
Marana/TRunHisto.h
TTree.h
Marana/TMarLumi.h
Marana/TMarBody.h
H1Pointers/H1FloatPtr.h
H1Skeleton/H1Tree.h
H1Pointers/H1IntPtr.h
Marana/TTools.h
H1Pointers/H1BytePtr.h
H1Mods/H1PartMuon.h
H1Mods/H1PartSelTrack.h
TLorentzVector.h
Marana/TMarH1ElecCalibration.h
TBenchmark.h
TMarEvent.h
H1Skeleton/H1EventList.h
H1Skeleton/H1PointerManager.h
H1Pointers/H1ObjectPtr.h
H1JetCalibration/H1JetCalibration.h
H1HfsCalibration/H1HfsCalibEmHad.h
H1ElecCalibration/H1ElecCalibration.h
H1OOBanks/H1BankPtr.h
H1Mods/H1PartCand.h
H1Mods/H1PartCandArrayPtr.h
H1Mods/H1PartEmArrayPtr.h
H1Mods/H1PartEm.h
H1Mods/H1PartMuonArrayPtr.h
H1Mods/H1PartJetArrayPtr.h
H1Mods/H1PartJet.h
H1Mods/H1PartSelTrackArrayPtr.h
H1Mods/H1ExclHfsIterator.h
H1Tracks/H1VertexFittedTrack.h
H1Tracks/H1Vertex.h

This graph shows which files directly or indirectly include this file:



Compounds

- class **TMarEvent**

Defines

- #define **MYR2D** 180.0/3.14159265359

7.24.1 Define Documentation

7.24.1.1 #define MYR2D 180.0/3.14159265359

Definition at line 83 of file TMarEvent.h.

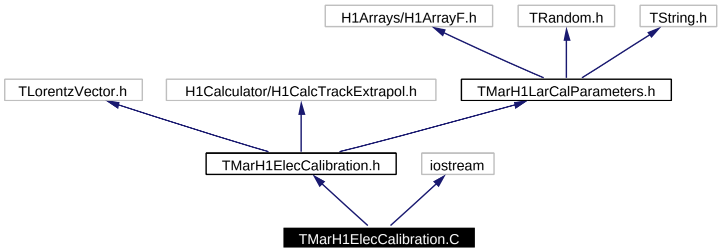
Referenced by TMarJetCal::ApplyCalib(), TMarEvent::ApplyCCBackgroundCuts(), TMarJetCal::ApplyHadroo2Calib(), TTriggerReweight::CCTriggerEff(), TTriggerReweight::DiJetsTriggerEff(), TMarEvent::FindElePho(), TMarEvent::FindJet(), TMarEvent::FindMuon(), TMarEvent::FindNP(), TTools::GetProjPhi(), TTools::IsLArCrack(), TMarJetCal::MyHadroo2KtJetCalibration(), TMarJetCal::MyHadroo2TestJetCalibration(), TMarEvent::PrintEventInfo(), TMarSyst::ScaleEnergyPartEm(), TMarSyst::ScaleEnergyPartJet(), TMarSyst::ScaleThetaPartEm(), TMarSyst::ScaleThetaPartJet(), and TMarSyst::ScaleThetaPartMuon().

7.25 TMarH1ElecCalibration.C File Reference

`#include "TMarH1ElecCalibration.h"`

`#include <iostream>`

Include dependency graph for TMarH1ElecCalibration.C:



Functions

- **ClassImp** (**TMarH1ElecCalibration**) **TMarH1ElecCalibration**

7.25.1 Function Documentation

7.25.1.1 ClassImp (TMarH1ElecCalibration)

Definition at line 34 of file TMarH1ElecCalibration.C.

References TMarH1ElecCalibration::bDoForwardWheelWiseCalibration, TMarH1ElecCalibration::bDoResolutionSmearing, TMarH1ElecCalibration::bDoStackWiseCalibration, TMarH1ElecCalibration::bDoZimpactWiseCalibration, TMarH1ElecCalibration::bUseTrackPhi, TMarH1ElecCalibration::bUseTrackTheta, TMarH1ElecCalibration::fCalibratedElectron, TMarH1ElecCalibration::fCalibration, TMarH1ElecCalibration::fCharge, TMarH1ElecCalibration::fElectronCluster, TMarH1ElecCalibration::fElectronPhi, TMarH1ElecCalibration::fElectronTheta, TMarH1ElecCalibration::fElectronTrack, TMarH1ElecCalibration::fExtrapol, and TMarH1ElecCalibration::fLinkedTrackType.

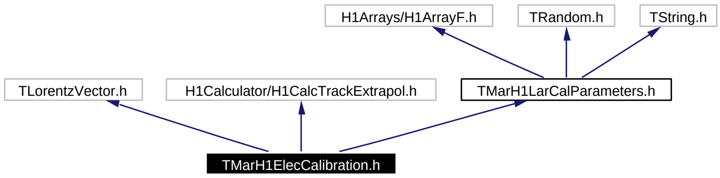
7.26 TMarH1ElecCalibration.h File Reference

`#include <TLorentzVector.h>`

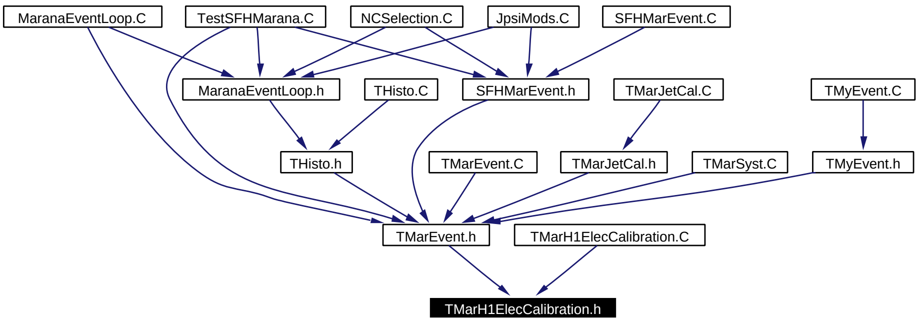
`#include "H1Calculator/H1CalcTrackExtrapol.h"`

`#include "TMarH1LarCalParameters.h"`

Include dependency graph for TMarH1ElecCalibration.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TMarH1ElecCalibration**

7.27 TMarH1LarCalParameters.C File Reference

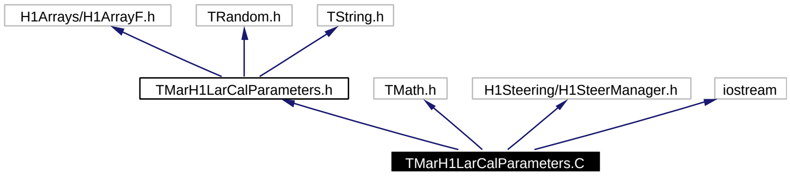
`#include "TMarH1LarCalParameters.h"`

`#include "TMath.h"`

`#include "H1Steering/H1SteerManager.h"`

`#include <iostream>`

Include dependency graph for TMarH1LarCalParameters.C:



Functions

- **ClassImp** (**TMarH1LarCalParameters**) **TMarH1LarCalParameters**

7.27.1 Function Documentation

7.27.1.1 ClassImp (TMarH1LarCalParameters)

Definition at line 34 of file TMarH1LarCalParameters.C.

References TMarH1LarCalParameters::fDataSet, TMarH1LarCalParameters::fEnergyResolutionConstantsData, TMarH1LarCalParameters::fEnergyResolutionConstantsMC, TMarH1LarCalParameters::fForwardWheelCalibrationFactor, TMarH1LarCalParameters::fForwardWheelConstants, TMarH1LarCalParameters::fOctantCalibrationFactor, TMarH1LarCalParameters::fOctantConstants, TMarH1LarCalParameters::fRandom, TMarH1LarCalParameters::fResolutionSmearingFactor, TMarH1LarCalParameters::fRunPeriod, TMarH1LarCalParameters::fRunPeriodName, TMarH1LarCalParameters::fZimpactCalibrationFactor, TMarH1LarCalParameters::fZimpactConstants, and TMarH1LarCalParameters::Reset().

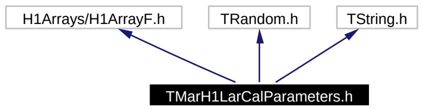
7.28 TMarH1LarCalParameters.h File Reference

`#include "H1Arrays/H1ArrayF.h"`

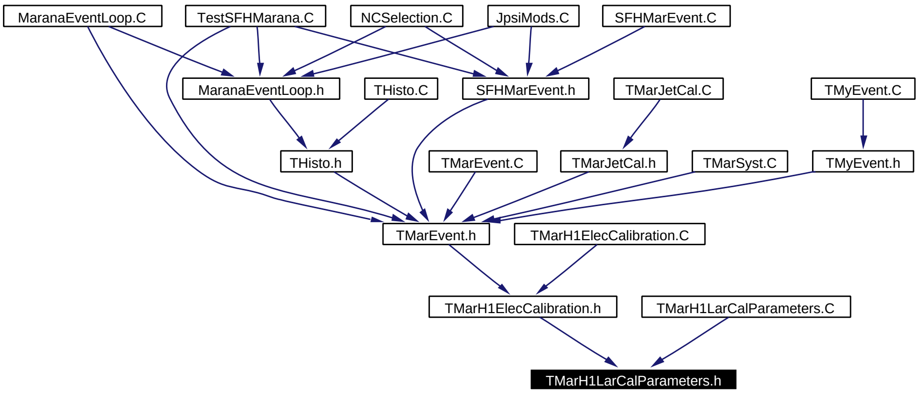
`#include <TRandom.h>`

`#include <TString.h>`

Include dependency graph for TMarH1LarCalParameters.h:



This graph shows which files directly or indirectly include this file:



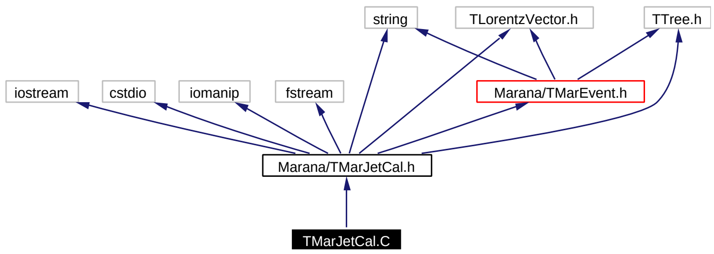
Compounds

- class **TMarH1LarCalParameters**

7.29 TMarJetCal.C File Reference

`#include "Marana/TMarJetCal.h"`

Include dependency graph for TMarJetCal.C:



Defines

- #define **MARJETCALDEBUG** 0

7.29.1 Define Documentation

7.29.1.1 #define MARJETCALDEBUG 0

Definition at line 15 of file TMarJetCal.C.

7.30 TMarJetCal.h File Reference

`#include <iostream>`

`#include <cstdio>`

`#include <iomanip>`

`#include <fstream>`

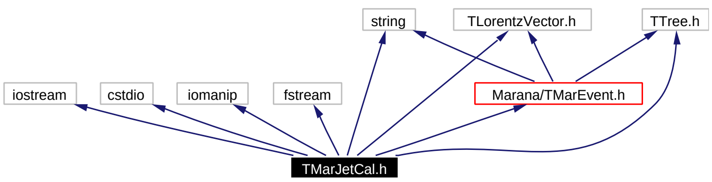
`#include <string>`

`#include <TLorentzVector.h>`

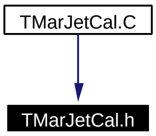
`#include <TTree.h>`

`#include "Marana/TMarEvent.h"`

Include dependency graph for TMarJetCal.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct **TBinnedval_t**
- struct **TBinnedcoef_t**
- class **TMarJetCal**

Defines

- #define **MYR2D** 180.0/3.14159265359
- #define **NBTHETABINS** 8
- #define **NBCOEFS** 3

7.30.1 Define Documentation

7.30.1.1 #define MYR2D 180.0/3.14159265359

Definition at line 25 of file TMarJetCal.h.

7.30.1.2 #define NBTHETABINS 8

Definition at line 28 of file TMarJetCal.h.

Referenced by TMarJetCal::ApplyCalib(), TMarJetCal::ApplyHadroo2Calib(), TMarJetCal::MyHadroo2KtJetCalibration(), TMarJetCal::MyHadroo2TestJetCalibration(), and TMarJetCal::TMarJetCal().

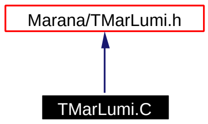
7.30.1.3 #define NBCOEFS 3

Definition at line 29 of file TMarJetCal.h.

7.31 TMarLumi.C File Reference

`#include "Marana/TMarLumi.h"`

Include dependency graph for TMarLumi.C:



Defines

- #define **MARLUMIDEBUG** 0

Functions

- **ClassImp** (**TMarLumi**) **TMarLumi**

7.31.1 Define Documentation

7.31.1.1 #define MARLUMIDEBUG 0

Definition at line 15 of file TMarLumi.C.

Referenced by ClassImp().

7.31.2 Function Documentation

7.31.2.1 ClassImp (TMarLumi)

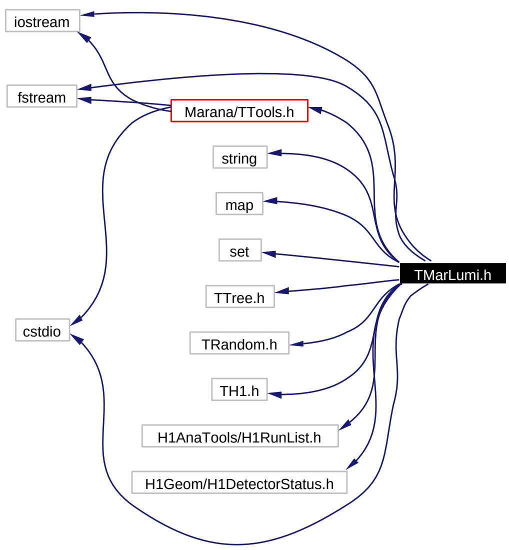
Definition at line 19 of file TMarLumi.C.

References TMarLumi::detStatus, TMarLumi::IsDataL(), TMarLumi::IsDataR(), TMarLumi::LumiPerRun, TMarLumi::LumiPerRunOld, MARLUMIDEBUG, TMarLumi::polar_integral, TMarLumi::rpolar, TMarLumi::runList, TMarLumi::RunNumber, TMarLumi::RunNumberOld, TMarLumi::TotalLumi, and TMarLumi::TotalLumiOld.

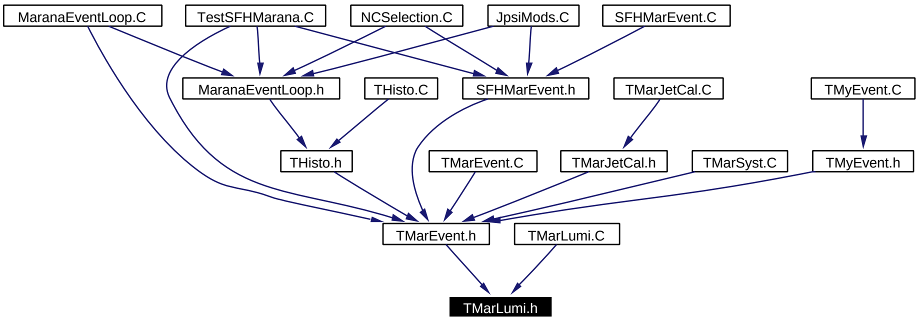
7.32 TMarLumi.h File Reference

```
#include <iostream>
#include <fstream>
#include <cstdio>
#include <string>
#include <map>
#include <set>
#include <TTree.h>
#include <TRandom.h>
#include <TH1.h>
#include "H1AnaTools/H1RunList.h"
#include "H1Geom/H1DetectorStatus.h"
#include <Marana/TTools.h>
```

Include dependency graph for TMarLumi.h:



This graph shows which files directly or indirectly include this file:



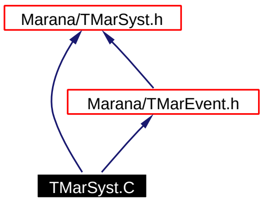
Compounds

- class **TMarLumi**

7.33 TMarSyst.C File Reference

```
#include "Marana/TMarSyst.h"
#include "Marana/TMarEvent.h"
```

Include dependency graph for TMarSyst.C:



Functions

- istream & **operator>>** (istream &in, **TMarSyst** &Syst)
- ostream & **operator<<** (ostream &out, **TMarSyst** &Syst)

7.33.1 Function Documentation

7.33.1.1 istream& operator>> (istream & *in*, TMarSyst & *Syst*)

Definition at line 92 of file TMarSyst.C.

References TMarSyst::MapPossibleScales, and TMarSyst::ScalesToBeDone.

7.33.1.2 ostream& operator<< (ostream & *out*, TMarSyst & *Syst*)

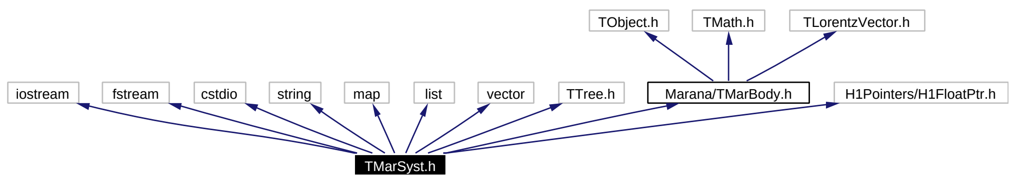
Definition at line 128 of file TMarSyst.C.

References TMarSyst::ScalesToBeDone.

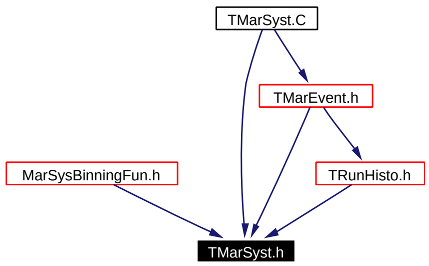
7.34 TMarSyst.h File Reference

```
#include <iostream>
#include <fstream>
#include <cstdio>
#include <string>
#include <map>
#include <list>
#include <vector>
#include <TTree.h>
#include "Marana/TMarBody.h"
#include "H1Pointers/H1FloatPtr.h"
```

Include dependency graph for TMarSyst.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TMarSyst**

Defines

- #define **MYR2D** 180.0/3.14159265359

7.34.1 Define Documentation

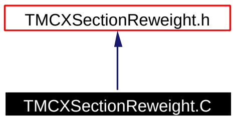
7.34.1.1 #define MYR2D 180.0/3.14159265359

Definition at line 24 of file TMarSyst.h.

7.35 TMCXSectionReweight.C File Reference

`#include "TMCXSectionReweight.h"`

Include dependency graph for TMCXSectionReweight.C:



Defines

- #define **QCDEBUG** 0

7.35.1 Define Documentation

7.35.1.1 #define QCDEBUG 0

Definition at line 13 of file TMCXSectionReweight.C.

7.36 TMCXSectionReweight.h File Reference

`#include <cstdio>`

`#include <cstdlib>`

`#include <iostream>`

`#include <fstream>`

`#include <string>`

`#include <vector>`

`#include <list>`

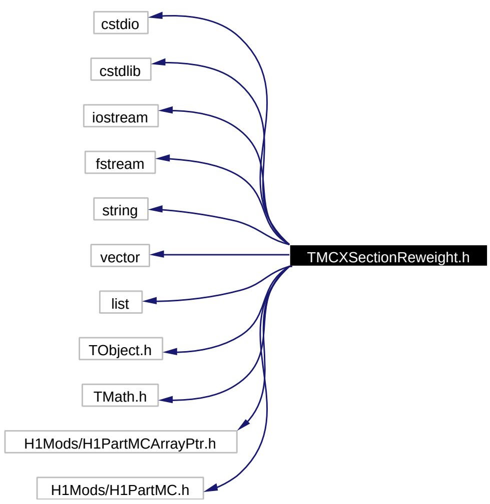
`#include <TObject.h>`

`#include <TMath.h>`

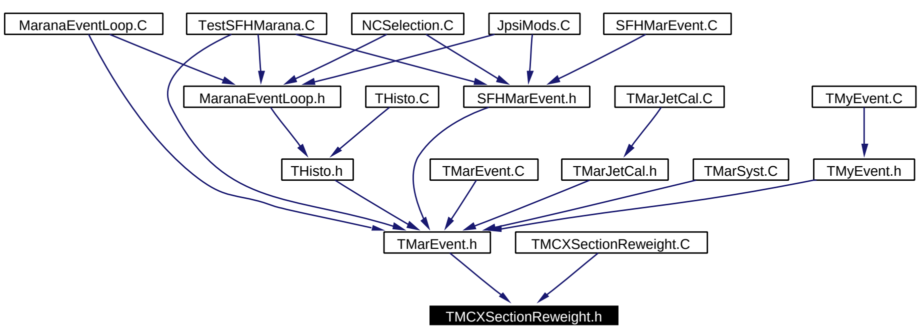
`#include "H1Mods/H1PartMCArrayPtr.h"`

`#include "H1Mods/H1PartMC.h"`

Include dependency graph for TMCXSectionReweight.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TMCXSectionReweight**

Defines

- #define **USEMARQCDFUNC** 0

7.36.1 Define Documentation

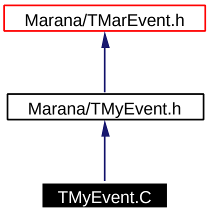
7.36.1.1 #define USEMARQCDFUNC 0

Definition at line 14 of file TMCXSectionReweight.h.

7.37 TMyEvent.C File Reference

`#include "Marana/TMyEvent.h"`

Include dependency graph for TMyEvent.C:



Functions

- **ClassImp** (**TMyEvent**) **TMyEvent**

7.37.1 Function Documentation

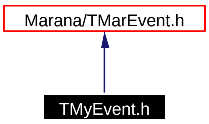
7.37.1.1 ClassImp (TMyEvent)

Definition at line 20 of file TMyEvent.C.

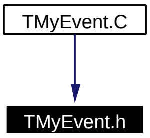
7.38 TMyEvent.h File Reference

`#include "Marana/TMarEvent.h"`

Include dependency graph for TMyEvent.h:



This graph shows which files directly or indirectly include this file:



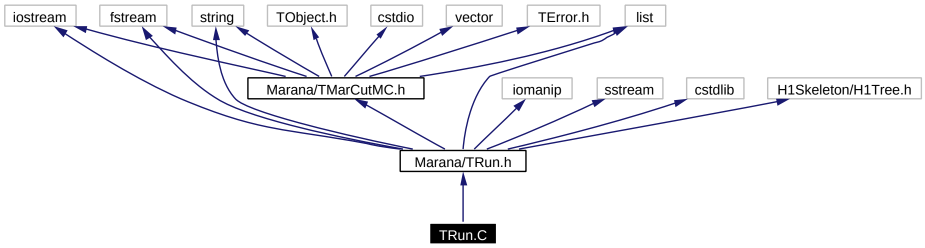
Compounds

- class **TMyEvent**

7.39 TRun.C File Reference

`#include "Marana/TRun.h"`

Include dependency graph for TRun.C:



7.40 TRun.h File Reference

`#include <iostream>`

`#include <iomanip>`

`#include <sstream>`

`#include <fstream>`

`#include <cstdlib>`

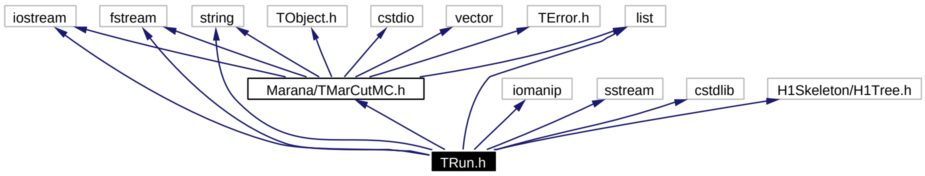
`#include <string>`

`#include <list>`

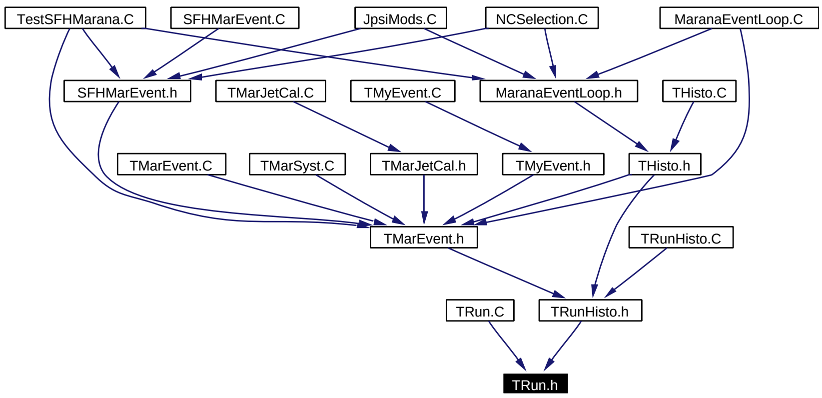
`#include "H1Skeleton/H1Tree.h"`

`#include "Marana/TMarCutMC.h"`

Include dependency graph for TRun.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TRun**

Defines

- #define **USERTREE** 0

7.40.1 Define Documentation

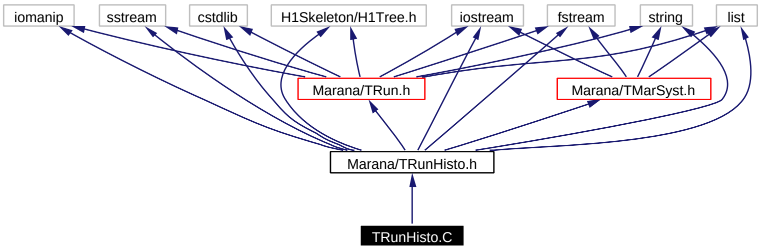
7.40.1.1 #define USERTREE 0

Definition at line 16 of file TRun.h.

7.41 TRunHisto.C File Reference

`#include "Marana/TRunHisto.h"`

Include dependency graph for TRunHisto.C:



7.42 TRunHisto.h File Reference

`#include <iostream>`

`#include <iomanip>`

`#include <sstream>`

`#include <fstream>`

`#include <cstdlib>`

`#include <string>`

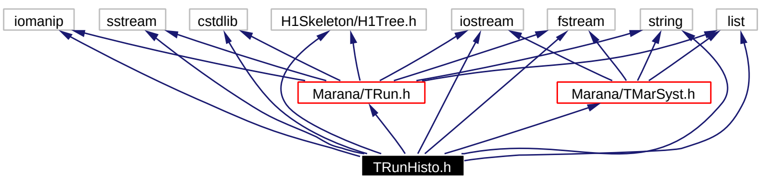
`#include <list>`

`#include "H1Skeleton/H1Tree.h"`

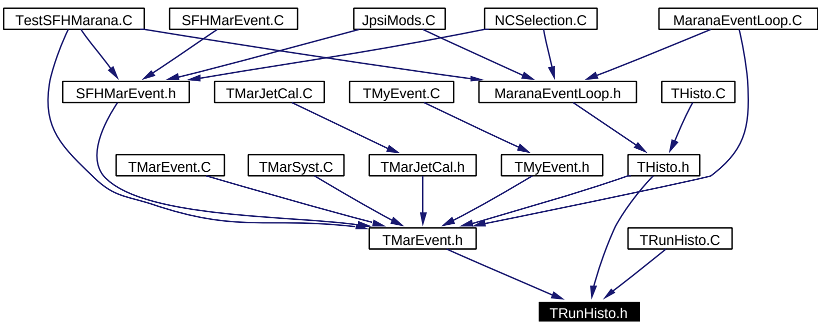
`#include "Marana/TRun.h"`

`#include "Marana/TMarSyst.h"`

Include dependency graph for TRunHisto.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TRunHisto**

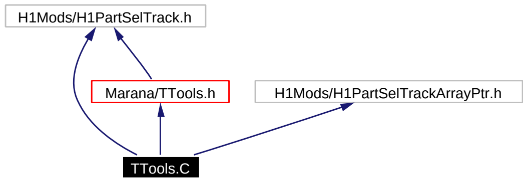
7.43 TTools.C File Reference

`#include "Marana/TTools.h"`

`#include "H1Mods/H1PartSelTrackArrayPtr.h"`

`#include "H1Mods/H1PartSelTrack.h"`

Include dependency graph for TTools.C:



Functions

- **ClassImp** (**TTools**)

7.43.1 Function Documentation

7.43.1.1 ClassImp (TTools)

7.44 TTools.h File Reference

`#include <cstdio>`

`#include <cstdlib>`

`#include <iostream>`

`#include <fstream>`

`#include "H1Skeleton/H1Tree.h"`

`#include "H1Pointers/H1BytePtr.h"`

`#include "H1Pointers/H1IntPtr.h"`

`#include "H1Pointers/H1ShortPtr.h"`

`#include "H1Pointers/H1FloatPtr.h"`

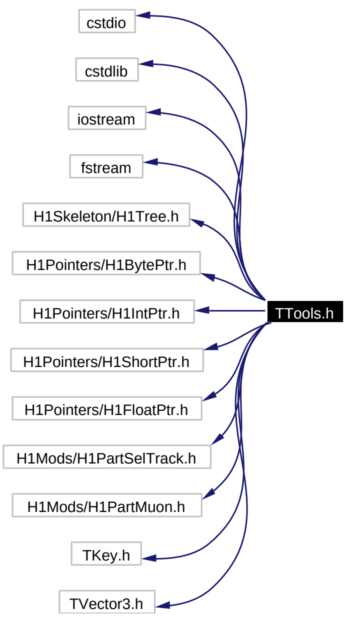
`#include "H1Mods/H1PartSelTrack.h"`

`#include "H1Mods/H1PartMuon.h"`

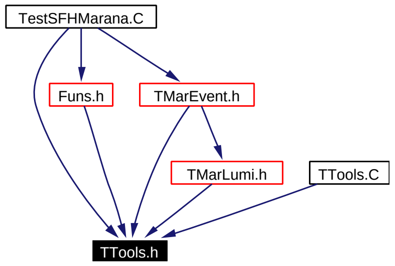
`#include <TKey.h>`

`#include <TVector3.h>`

Include dependency graph for TTools.h:



This graph shows which files directly or indirectly include this file:



Compounds

- class **TTools**

Defines

- #define **MYR2D** 180.0/3.14159265359
- #define **DATAID** 0
- #define **MCDJANGONCID** 1
- #define **MCDJANGOCCID** 2
- #define **MCGPRODDIRID** 3
- #define **MCGPRODRESID** 4
- #define **MCGPRODCCID** 5
- #define **MCGPRODBBID** 6
- #define **MCRAPGAPNCID** 7
- #define **MCGRAPEID** 8
- #define **MCEPVECID** 9
- #define **MCCOMPTONID** 10
- #define **BFIELDCONST** 0.0003
- #define **BFIELDNOM** 11.6083
- #define **rCalo** 100.5
- #define **zBACKDET** -150.0
- #define **zEDBBE** -218.5
- #define **zIF1** 292.0

7.44.1 Define Documentation

7.44.1.1 #define MYR2D 180.0/3.14159265359

Definition at line 29 of file TTools.h.

7.44.1.2 #define DATAID 0

Definition at line 32 of file TTools.h.

7.44.1.3 #define MCDJANGONCID 1

Definition at line 33 of file TTools.h.

7.44.1.4 #define MCDJANGOCCID 2

Definition at line 34 of file TTools.h.

7.44.1.5 #define MCGPRODDIRID 3

Definition at line 35 of file TTools.h.

7.44.1.6 #define MCGPRODRESID 4

Definition at line 36 of file TTools.h.

7.44.1.7 #define MCGPRODCCID 5

Definition at line 37 of file TTools.h.

7.44.1.8 #define MCGPRODBBID 6

Definition at line 38 of file TTools.h.

7.44.1.9 #define MCRAPGAPNCID 7

Definition at line 39 of file TTools.h.

Referenced by TTools::IsMCQ2OK().

7.44.1.10 #define MCGRAPEID 8

Definition at line 40 of file TTools.h.

7.44.1.11 #define MCEPVECID 9

Definition at line 41 of file TTools.h.

7.44.1.12 #define MCCOMPTONID 10

Definition at line 42 of file TTools.h.

7.44.1.13 #define BFIELDCONST 0.0003

Definition at line 46 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.44.1.14 #define BFIELDNOM 11.6083

Definition at line 47 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.44.1.15 #define rCalo 100.5

Definition at line 50 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.44.1.16 #define zBACKDET -150.0

Definition at line 53 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.44.1.17 #define zEDBBE -218.5

Definition at line 54 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.44.1.18 #define zIF1 292.0

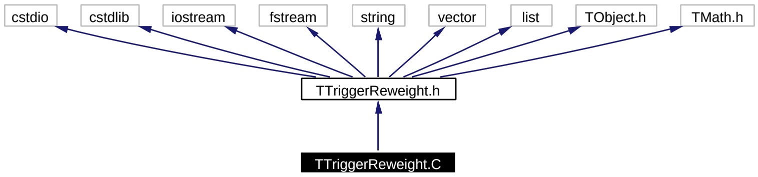
Definition at line 55 of file TTools.h.

Referenced by TTools::CalcExtraPolTrack().

7.45 TTriggerReweight.C File Reference

`#include "TTriggerReweight.h"`

Include dependency graph for TTriggerReweight.C:



7.46 TTriggerReweight.h File Reference

#include <cstdio>

#include <cstdlib>

#include <iostream>

#include <fstream>

#include <string>

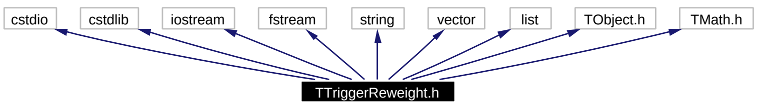
#include <vector>

#include <list>

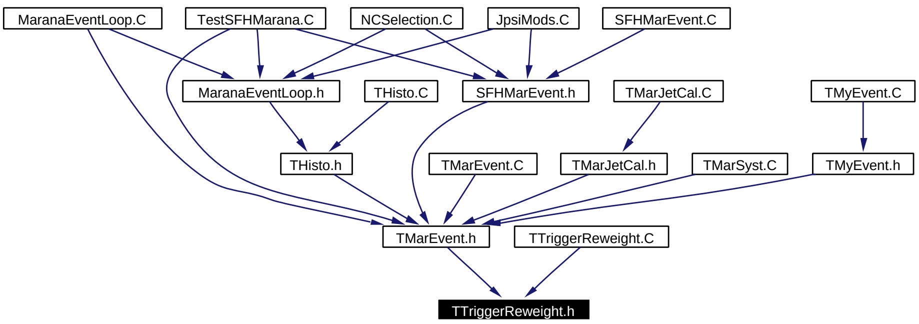
#include <TObject.h>

#include <TMath.h>

Include dependency graph for TTriggerReweight.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct **tr99_1_NEW**
- class **TTriggerReweight**

7.47 UserTreeParts.h File Reference

7.47.1 Detailed Description

Declares objects for Marana user tree access.

Author: Jenny List

Date
2005/06/07 17:02:57

Author
blist

Changelog:

- 31.5.05 JL First version
- 6.6.05 BL: Make variables global instead of static to ensure only one instance in the program

Definition in file **UserTreeParts.h**.

`#include "jbltools/sfh/h1/H1Funs.h"`

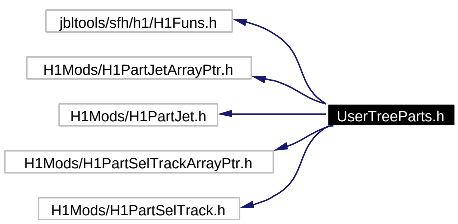
`#include "H1Mods/H1PartJetArrayPtr.h"`

`#include "H1Mods/H1PartJet.h"`

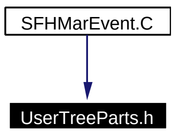
`#include "H1Mods/H1PartSelTrackArrayPtr.h"`

`#include "H1Mods/H1PartSelTrack.h"`

Include dependency graph for UserTreeParts.h:



This graph shows which files directly or indirectly include this file:



Variables

- JBLH1ClonesArrayEntries & **user_NumGenKtJets**
- JBLH1SomeArrayIterator< H1PartJetArrayPtr > & **user_GenKtJets**

- JBLH1ClonesArrayEntries & **user_NumDTRATracks**
- JBLH1SomeArrayIterator< H1PartSelTrackArrayPtr > & **user_DTRATracks**
- JBLH1ClonesArrayEntries & **user_NumDTNVTracks**
- JBLH1SomeArrayIterator< H1PartSelTrackArrayPtr > & **user_DTNVTracks**

7.47.2 Variable Documentation

7.47.2.1 JBLH1ClonesArrayEntries& user_NumGenKtJets

Definition at line 25 of file UserTreeParts.h.

7.47.2.2 JBLH1SomeArrayIterator<H1PartJetArrayPtr>& user_GenKtJets

Definition at line 26 of file UserTreeParts.h.

7.47.2.3 JBLH1ClonesArrayEntries& user_NumDTRATracks

Definition at line 29 of file UserTreeParts.h.

7.47.2.4 JBLH1SomeArrayIterator<H1PartSelTrackArrayPtr>& user_DTRATracks

Definition at line 30 of file UserTreeParts.h.

7.47.2.5 JBLH1ClonesArrayEntries& user_NumDTNVTracks

Definition at line 33 of file UserTreeParts.h.

7.47.2.6 JBLH1SomeArrayIterator<H1PartSelTrackArrayPtr>& user_DTNVTracks

Definition at line 34 of file UserTreeParts.h.

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