# BRAHMS status: BRAHMS200

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- Brahms: GEANT3 based detector simulation package:
  - TDR detector as far as possible
  - full tracking
  - full track reconstruction package
  - new calorimeter as decided in December at CERN
  - calorimeter reconstruction software (... nearly...)

- development release of new version available since May on Zeuthen server

- production release will wait for stable calorimeter software

- layout of inner detector (CCD version) as decided at CERN/Obernai:
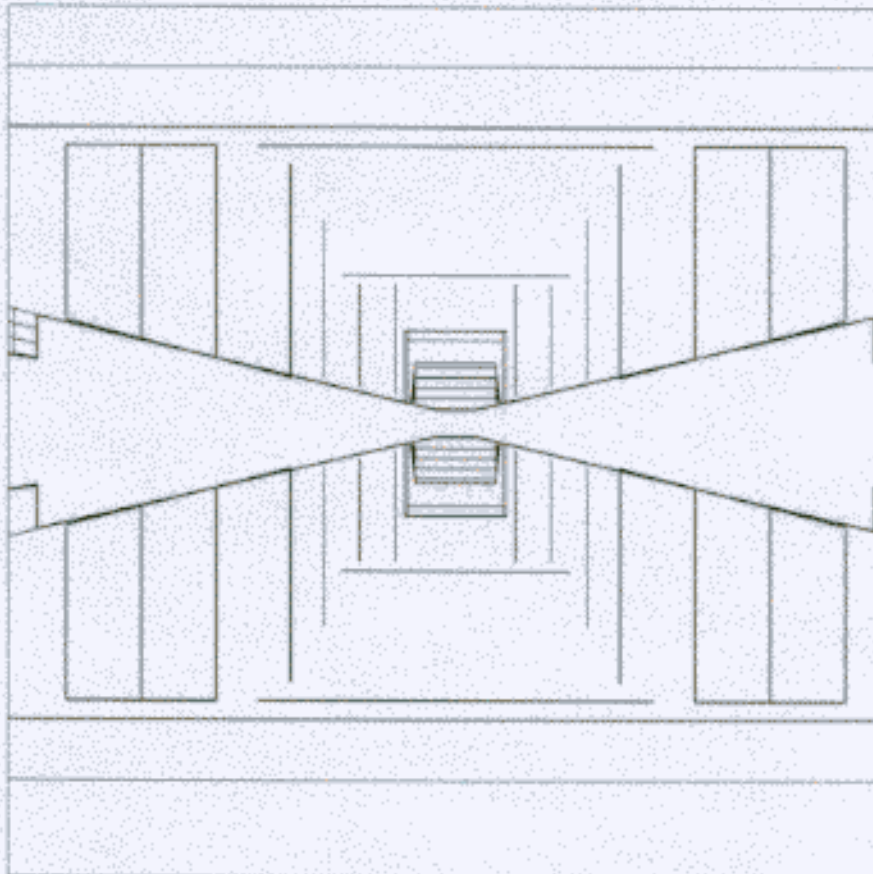
- some realistic support for CCD is included

- some realistic support for FTD is included

- SIT support is missing, material estimate is included

- APS detector version included

TPC/FCH

- TPC essentially unchanged

- endplates now 24cm instead of 30 to make room for FCH

- 6cm thick FCH (K.Mönig) included
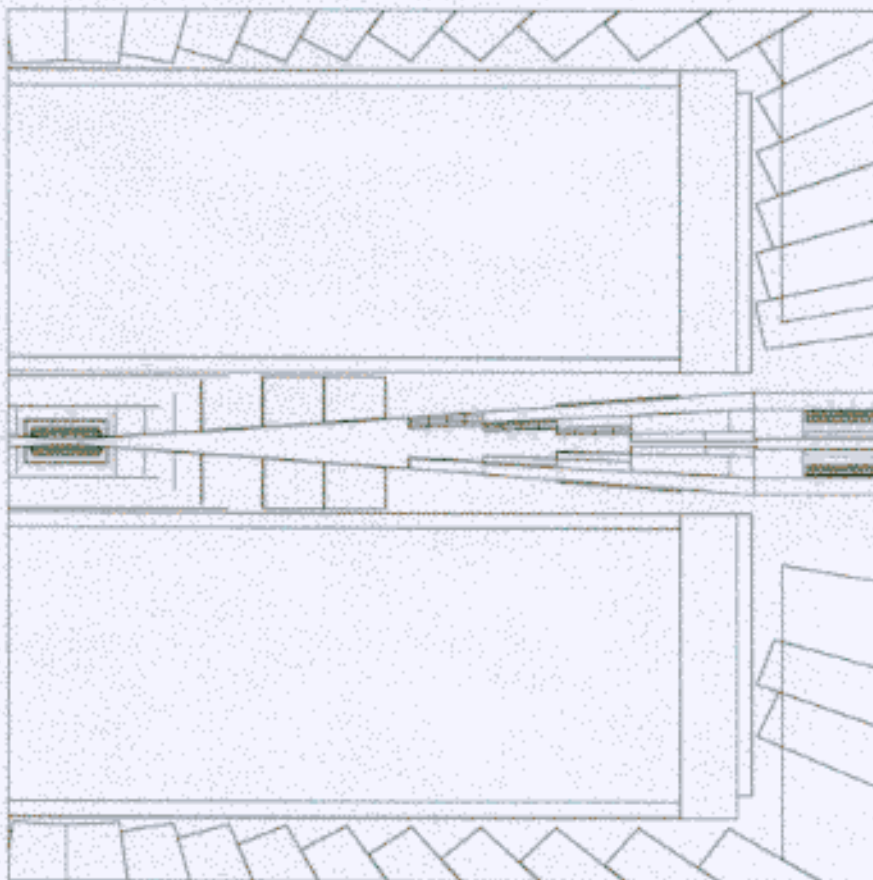
- need to revisit the material for the TPC

- need to think about cables and materials in the endcap

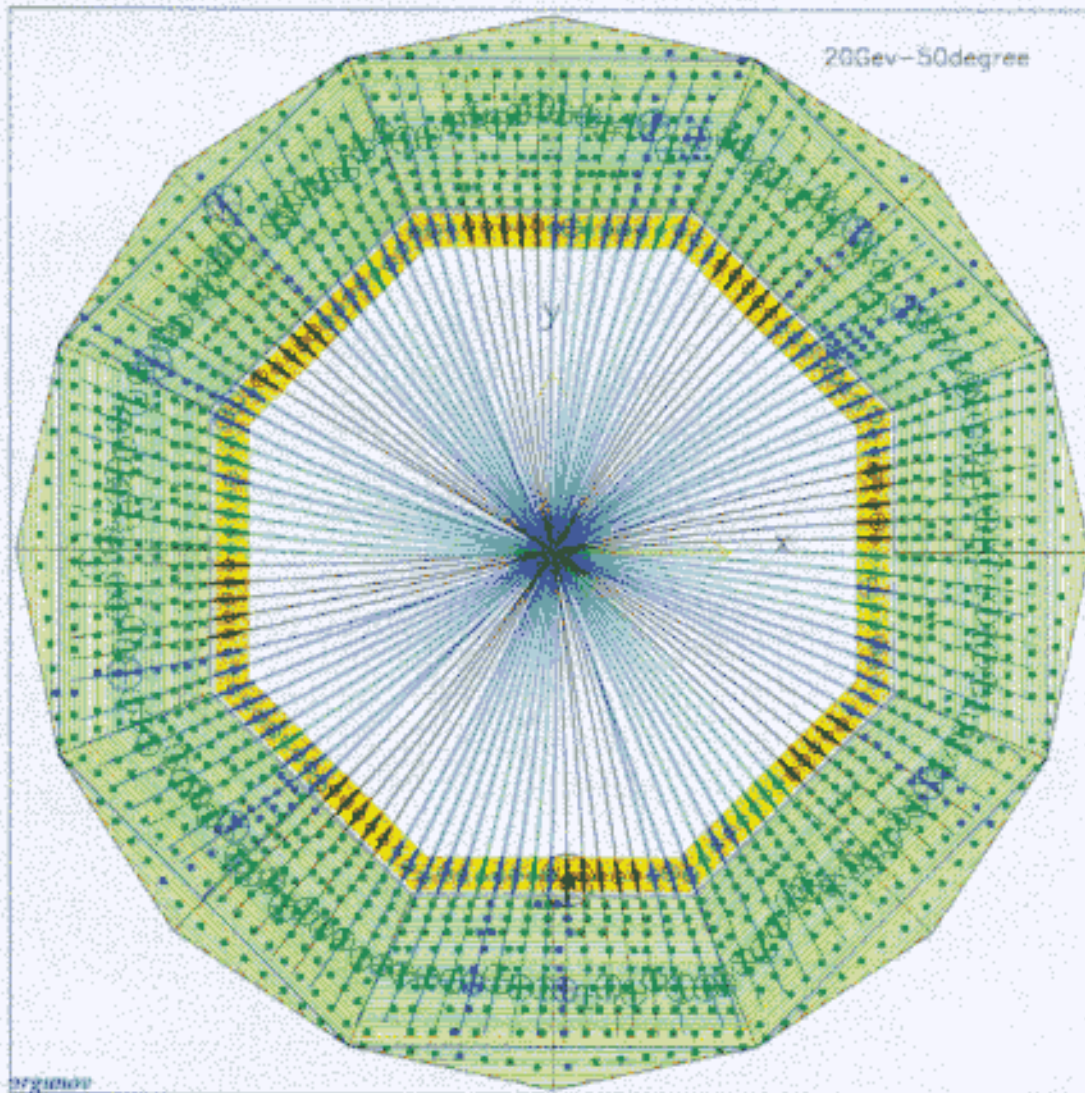- need to finalise the readout structure: number of rows, pads, ...

Calorimeter Reconstruction

- a large effort in France (ECAL) and in DESY (HCAL + overall cluster finding)

- no final results yet

- as a glimpse:
  - plot by V. Morgunov
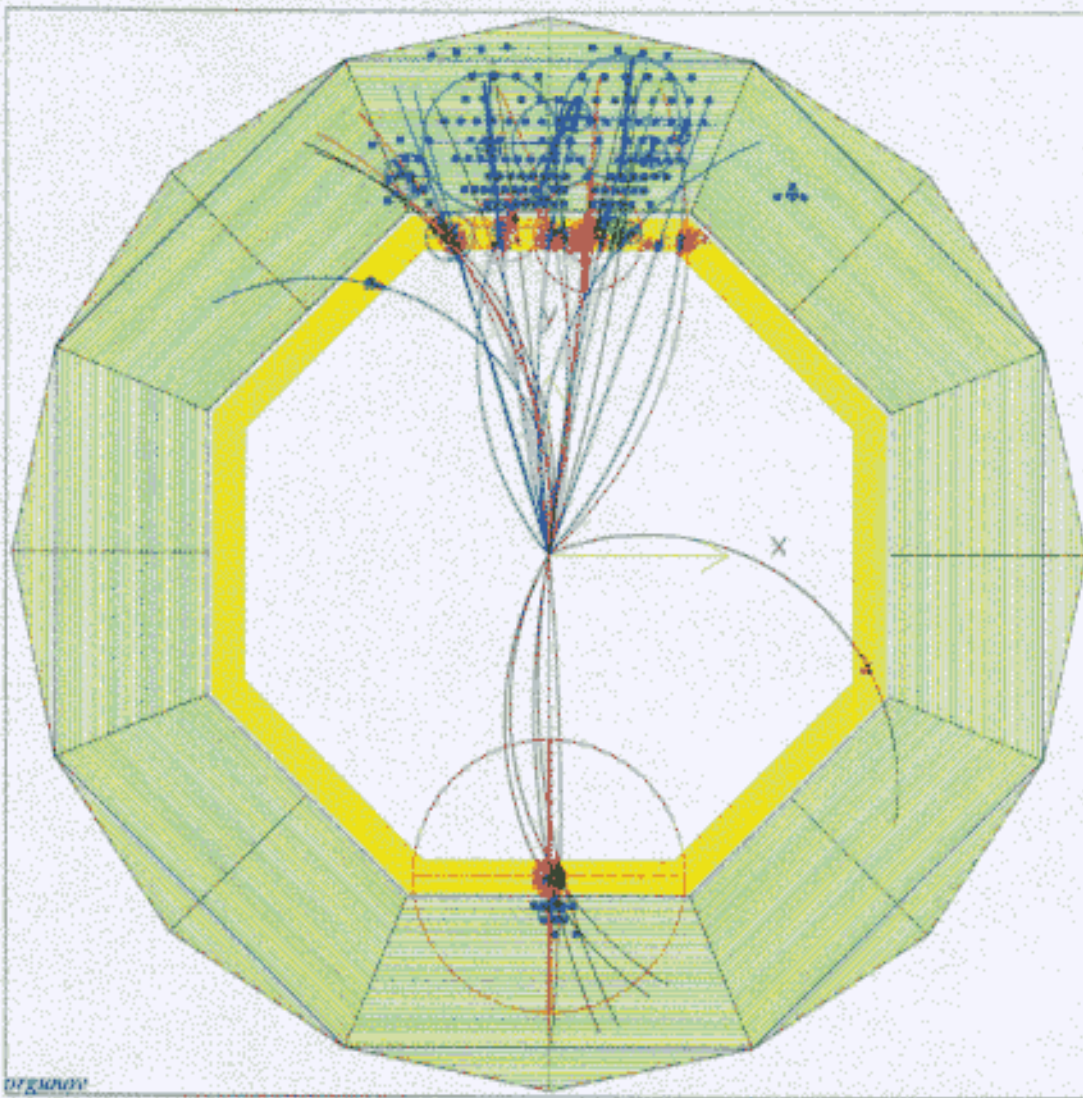
Calorimeter Reconstruction

- calorimeter reconstruction is good enough to measure the curvature of tracks:

20Gev-50degree

- recosntruction only in ECAL at the moment
- no merging to HCAL nor to TPC

Conclusions, Outlook

- GEANT 3 simulation is getting there, but it took a lot longer than anticipated!
    - personpower!
    - complexity!

- significant effort went into reconstruction packages for tracking and (ongoing) calorimetry: very important for the final understanding of the detector

- long term goal:
    - move to more modern technologies, e.g. GEANT4
    - interface to more modern analysis packages, e.g. root, JAS, ...
    - keep the functionality

- My guess is BRAHMS will be with us for a while to come

- More effort is very welcome, in particular in moving into more modern technologies