Investigation of kicker duration and kicker strength

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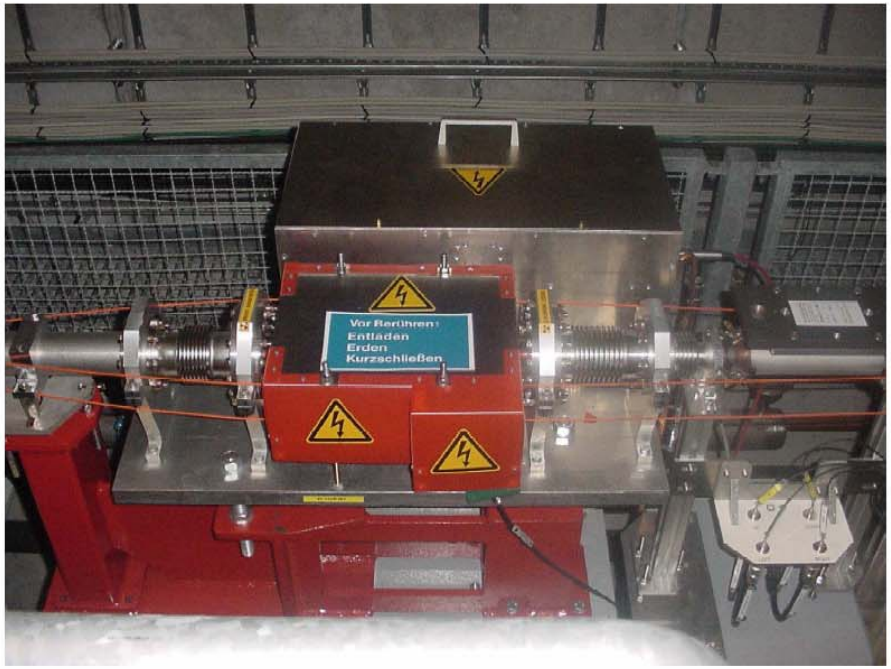
Results of measurements

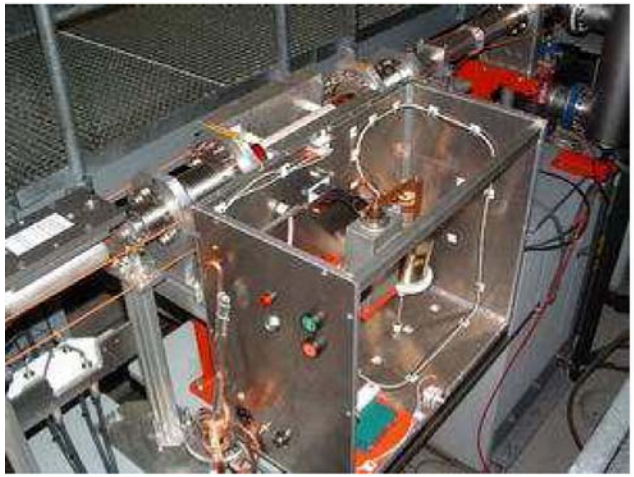
Kicker setup in the Tunnel

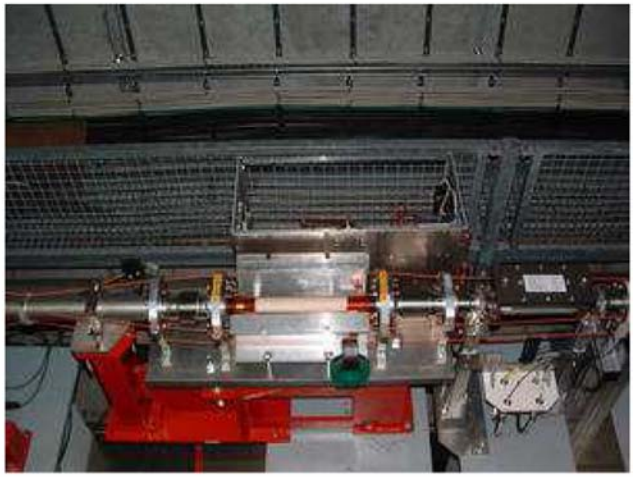


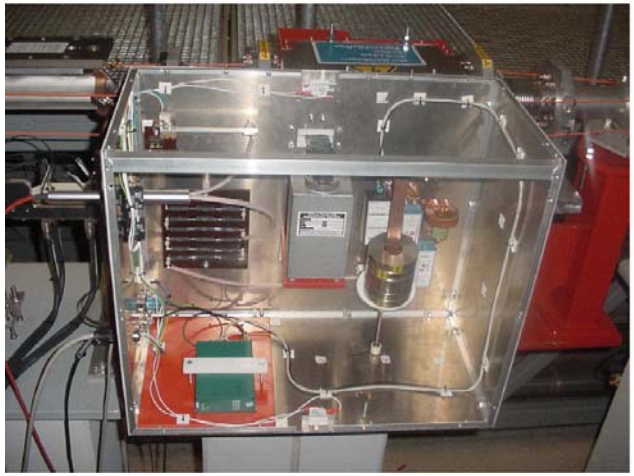
Courtesy: Frank Obier

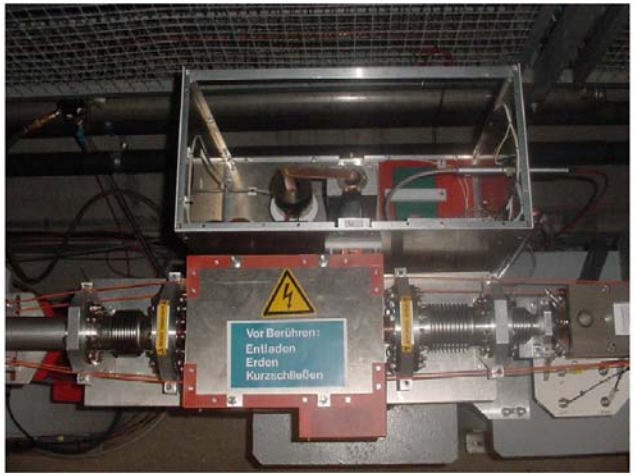
Results of measurements

5. Kicker setup in the Tunnel



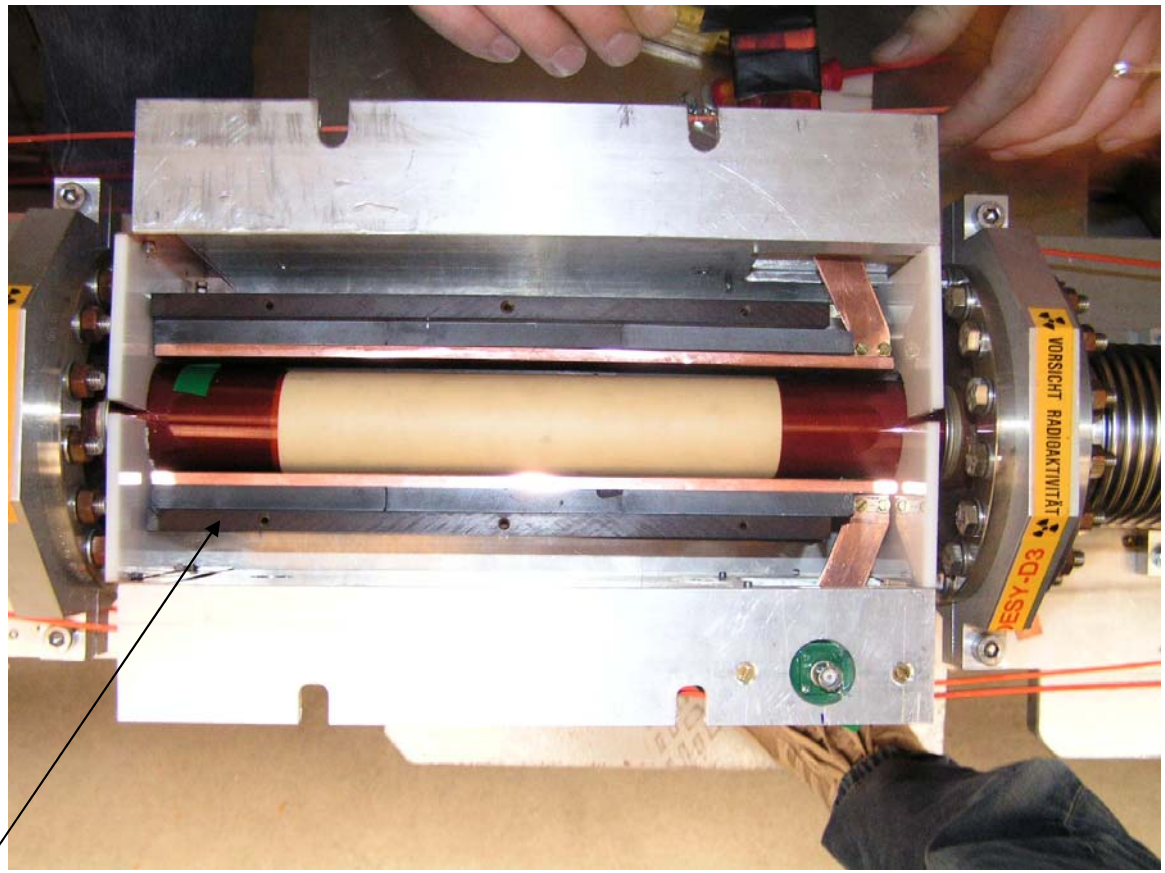






Courtesy: Frank Obier

Results of measurements

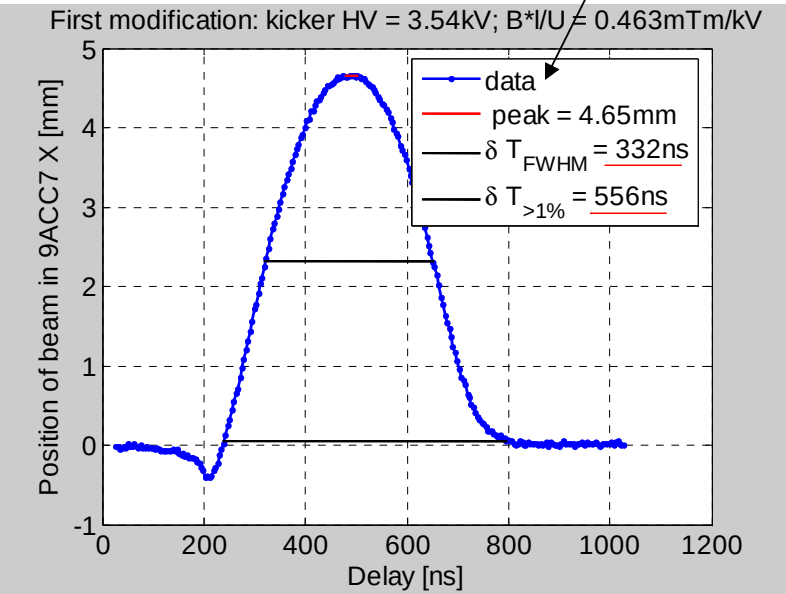


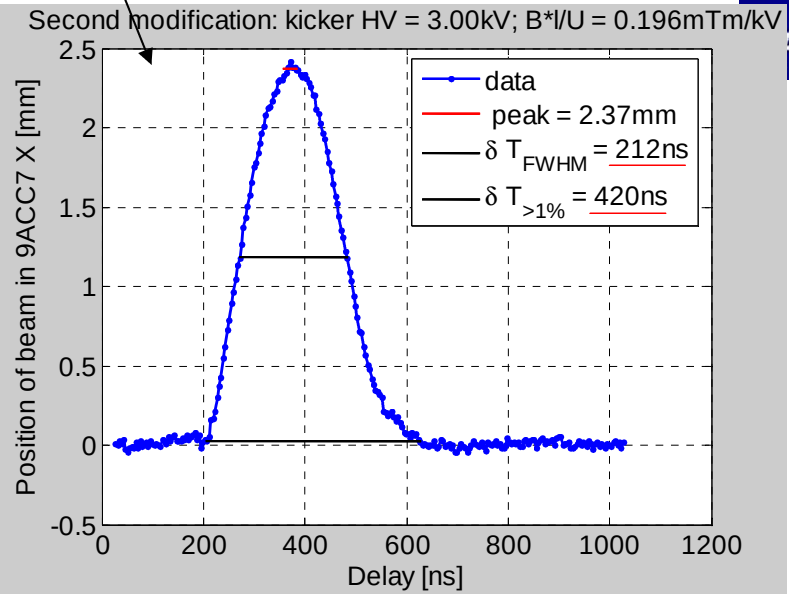
Ferrites

Courtesy: Frank Obier

Results of measurements

C = 39nF (1000ns) 12 nF (500ns) 4nF(290ns) 3nF (200ns)





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2007-01-09T113426-scan-kicker-delay-new

beam energy = 683.0 MeV
kicker HV = 3.54 kV
kick strength = 0.720 mrad
integrated B*dl = 1.640 mTm
kick strength/HV = 0.203 mrad/kV
integrated B*dl/HV= 0.463 mTm/kV

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2007-01-23T182032-scan-kicker-delay-new

beam energy = 480.0 MeV
kicker HV = 3.00 kV
kick strength = 0.367 mrad
integrated B*dl = 0.587 mTm
kick strength/HV = 0.122 mrad/kV
integrated B*dl/HV= 0.196 mTm/kV

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⇒ The kicker strength is reduced by about a factor of 2.3

⇒ If 28kV can be applied 0.197mTm/kV provides 3.3mrad kick @500MeV (fulfill specs)