

OLYMPUS Testbeam at DESY/T22 in May

OLYMPUS Collaboration Meeting
26./27. April 2011

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OLYMPUS Testbeam at DESY/T22 in May

T22 status/schedule:

- Beam species can now be switched between electrons and positrons (upgrade to selection dipole after request from Mainz)
 - Setup can start this week (after the collaboration meeting)
 - whole May: beam (one week possible break)
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- SYMB (Mainz)
 - MWPCs (Petersburg)
 - GEMs (Hampton)

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Infrastructure:

- Gases have been ordered (Uwe)
- ocontrol2 for private network in T22 area (Bonn) and storage (several TB)
- 8 port switch in counting room
- 6 RJ45 cables to testbeam enclosure
- lots of motivated people from Mainz!

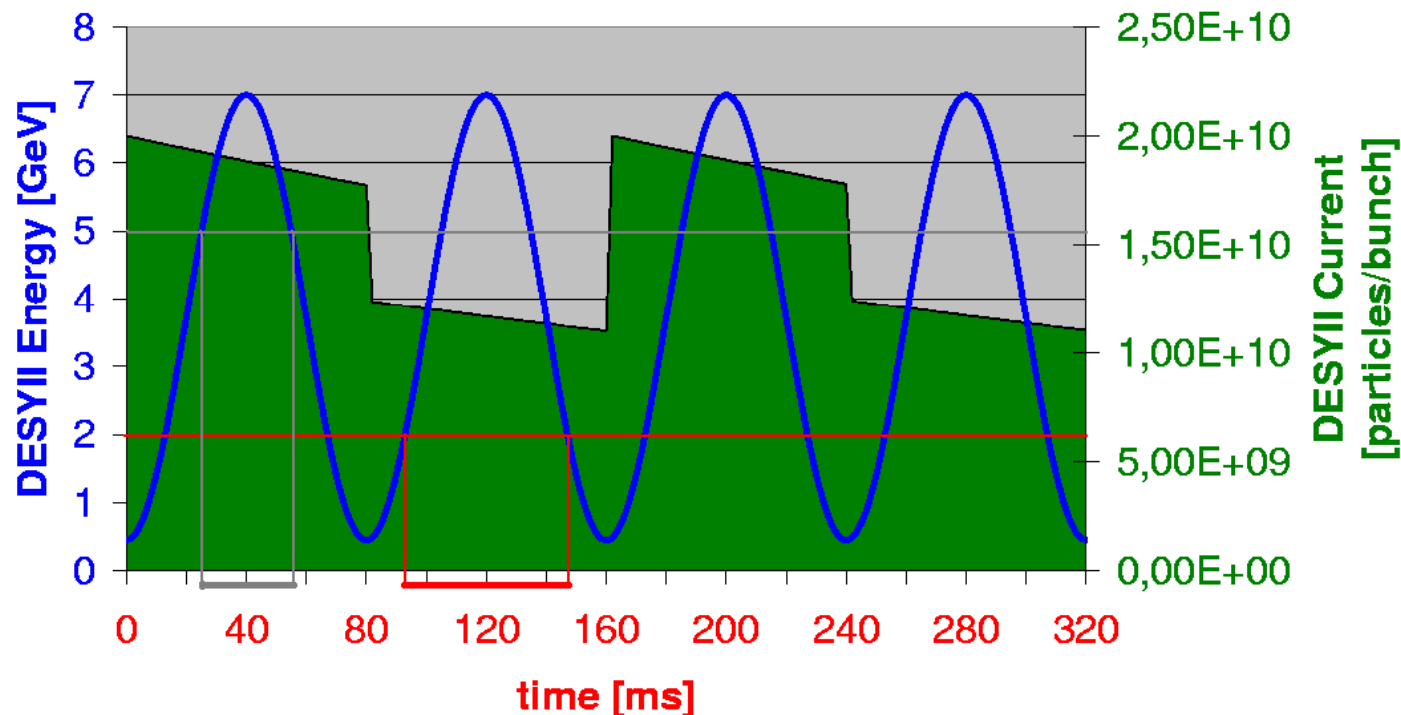
Don't forget to bring your favorite oscilloscopes, screw drivers, etc.!

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Beam:

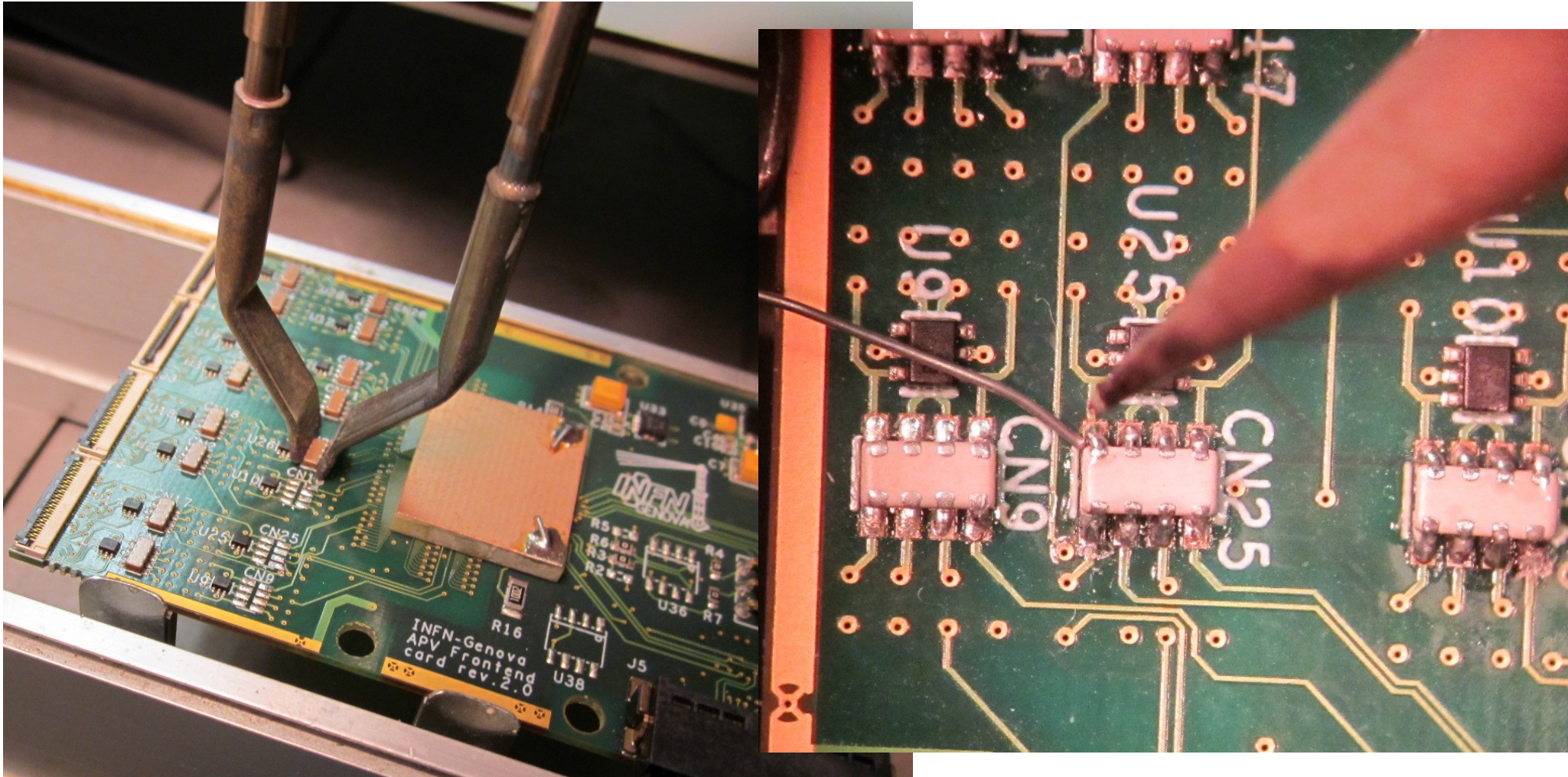
- electrons / positrons user-switchable (SYMB request)
- up to ~ 6 GeV, 5% energy width, stability $\sim 10^4$
- $\sim 10^4$ particles/s at 2 GeV
- beam size \sim cm (user-controlled primary collimator)

Ideal DESY II Cycle (no extraction)



OLYMPUS Testbeam: GEM Lumis

During Ester changed 128 coupling cap arrays from 1nF to 10pF in Mainz – now they're matched to our readout boards



OLYMPUS Testbeam: GEM Lumis

Goals for GEM Lumis:

- See signals from beam electrons with every detector module (9 detectors in total)
- Scan HV with beam to determine nominal operating HV (efficiency!)
- Move detectors for spatial efficiency scan
- Combine GEM and MWPC data (relative positions)
- Combine GEM and Si tracker data (GEM resolution)
- Test implementation in OLYMPUS DAQ