

DESY EUROTeV Activities in 2008

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EUROTeV Annual Meeting

30.01.2009

- Study of fast ion instabilities in electron damping ring (G. Xia, E. Elsen)
 - analytic ion density investigation
 - simulation studies, influence of:
 - mini train filling patterns
 - vacuum pressure
 - feedback gains
 - experimental study at ATF damping ring

- Publications:
 - G. Xia, E. Elsen, EUROTeV-Report-2008-004
 - EPAC presentation

- Radiation simulations on target and OMD (A. Ushakov)
- Photon collimator design (collaboration w Liverpool)
- Polarisation processes in GEANT4 (A. Schälicke et al.)
- Conceptual design of a low energy polarimeter-E166 relevance (S. Riemann et al.)
- Publications:
 - Workshop on Polarisation and Beam Energy Measurement, DESY Zeuthen
 - Dollan et al., EUROTeV-Report-2008-091
 - Reports at ECFA-WS (Warsaw), SPIN08, LCWS2008, IEEE NSS (Dresden), EUROTeV-WS, Positron Source Collaboration Mtg.

- Failure mode simulations (D. Krücker, I. Melzer-Pellmann)
- Extending work done for linacs to BDS
- e.g. damage to spoilers and collimators at various failure modes:
 - RF phase and amplitude errors
 - magnet power supply failures
 - etc.

- Publications:
 - EPAC: EUROTeV-Reports 2008-003, 2008-017
 - EUROTeV-Report-2008-075
 - ILC08 Workshop

- Participation in LiCAS measurements at DESY
- Effects of cryogenic operation parameters on mechanical stability of linac modules at FLASH
- XFEL mock-up tunnel vibration measurements
- Module 8 vibration measurements

- Publications:
 - R. Amirikas et al. WEPP075 (EPAC)
 - R. Amirikas et al. TUPPH078 (FEL Conference)

- Salaries of non-permanent staff:
 - A. Ushakov
 - D. Kruecker
 - G. Xia (0.3 FTE)
 - R. Amirikas (0.3 FTE)
 - A. Bertolini (0.3 FTE)

- 3 FTE (postdoc level):
 - ~200 kEUR for 2008