

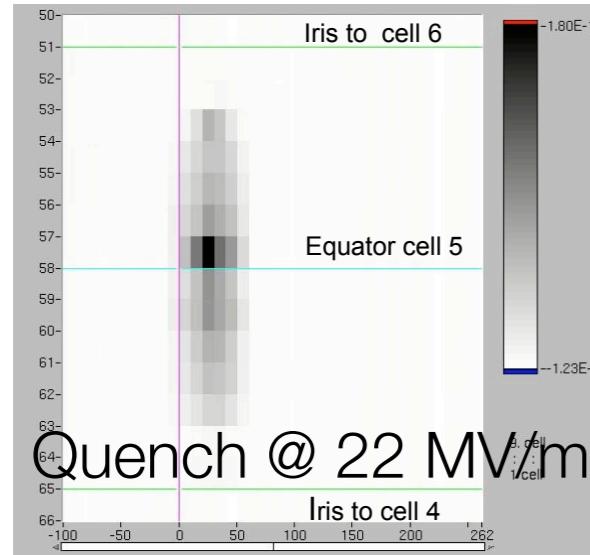
Summary: Accelerator

E.Elsen

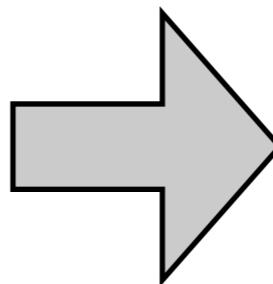


Superconducting Cavities

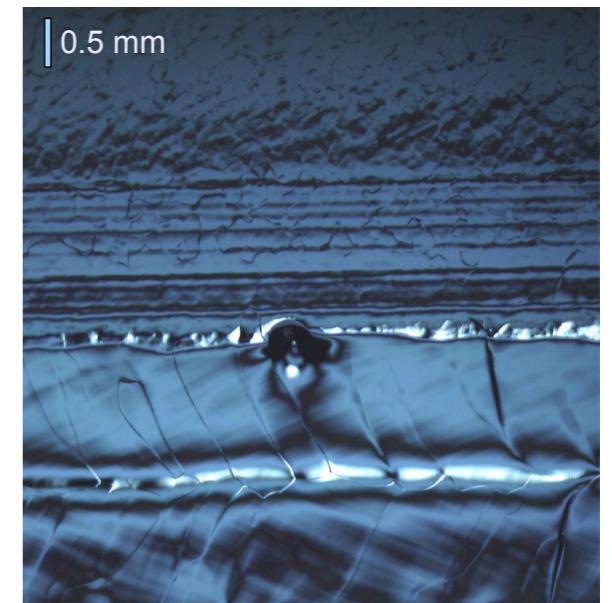
Temperature map of quenched cavity



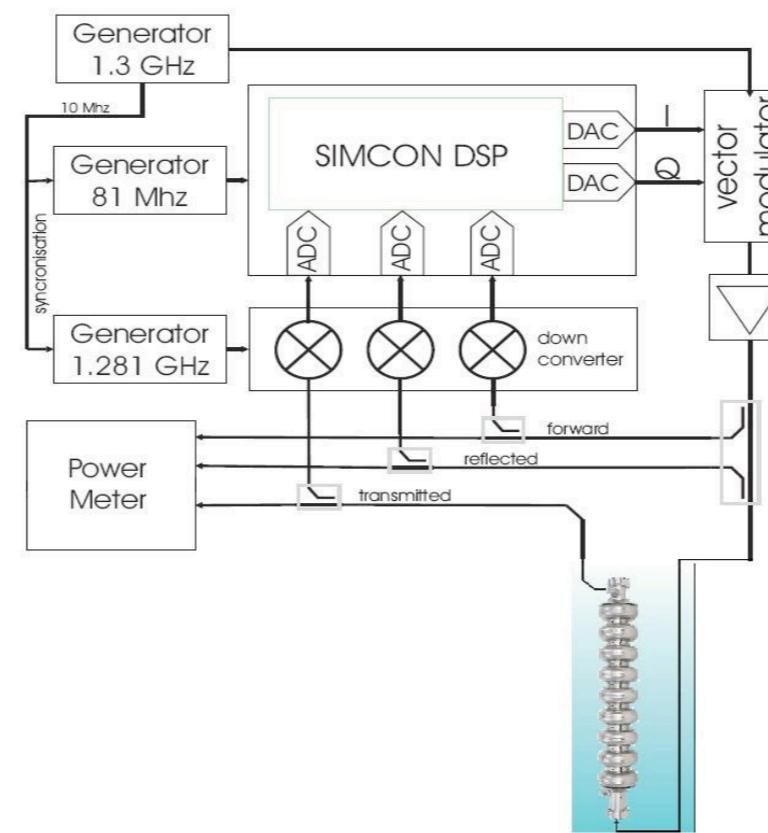
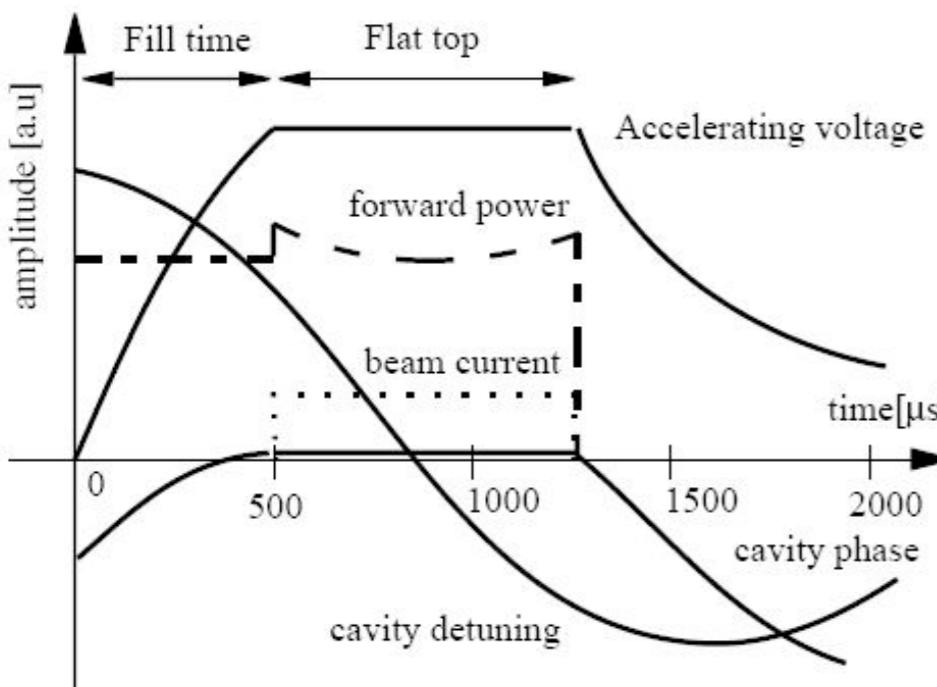
Relating local temperature rises to surface defects



S.Aderhold (DESY)



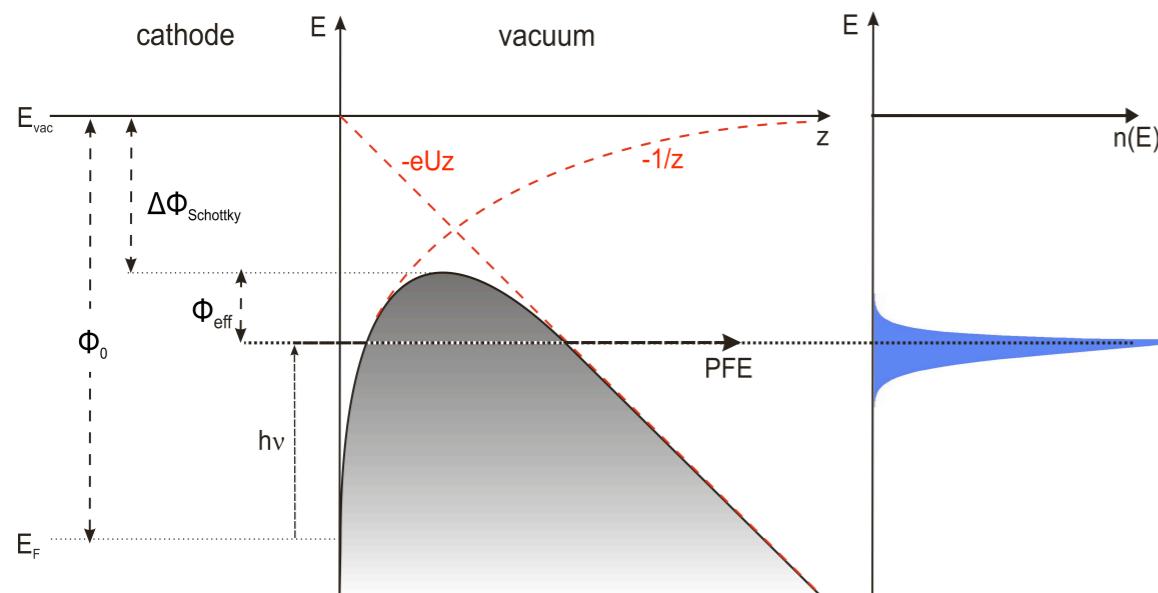
M.Wenskat (DESY)



Detailed control of electric field (vector sum) in all 9 cells of cavity.
Enables rapid test of cavities for XFEL and ILC:
Q vs accelerating gradient

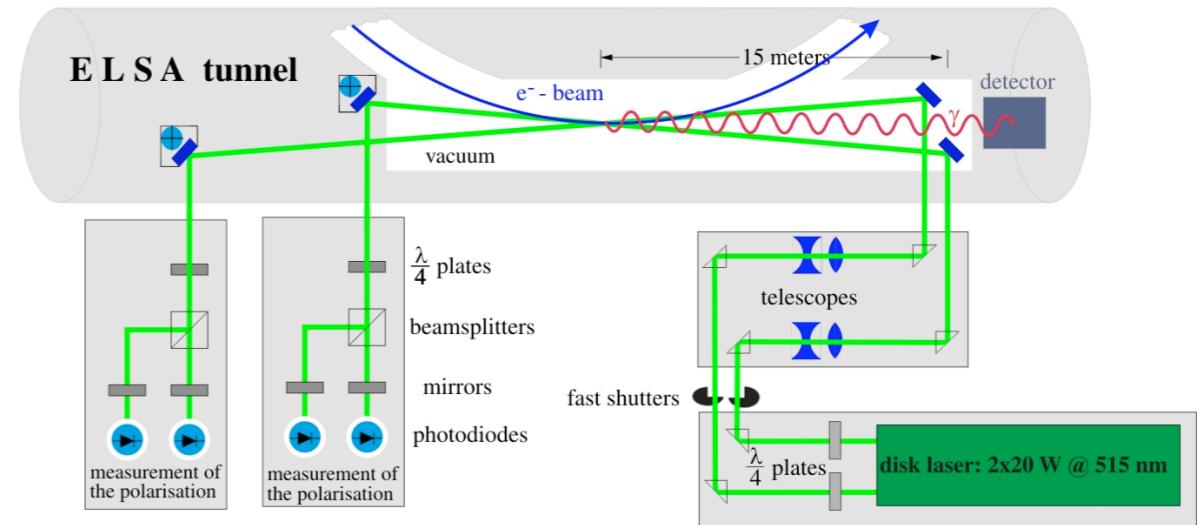
Low emittance source & Compton Polarimetry

B.Bornmann (Wuppertal)

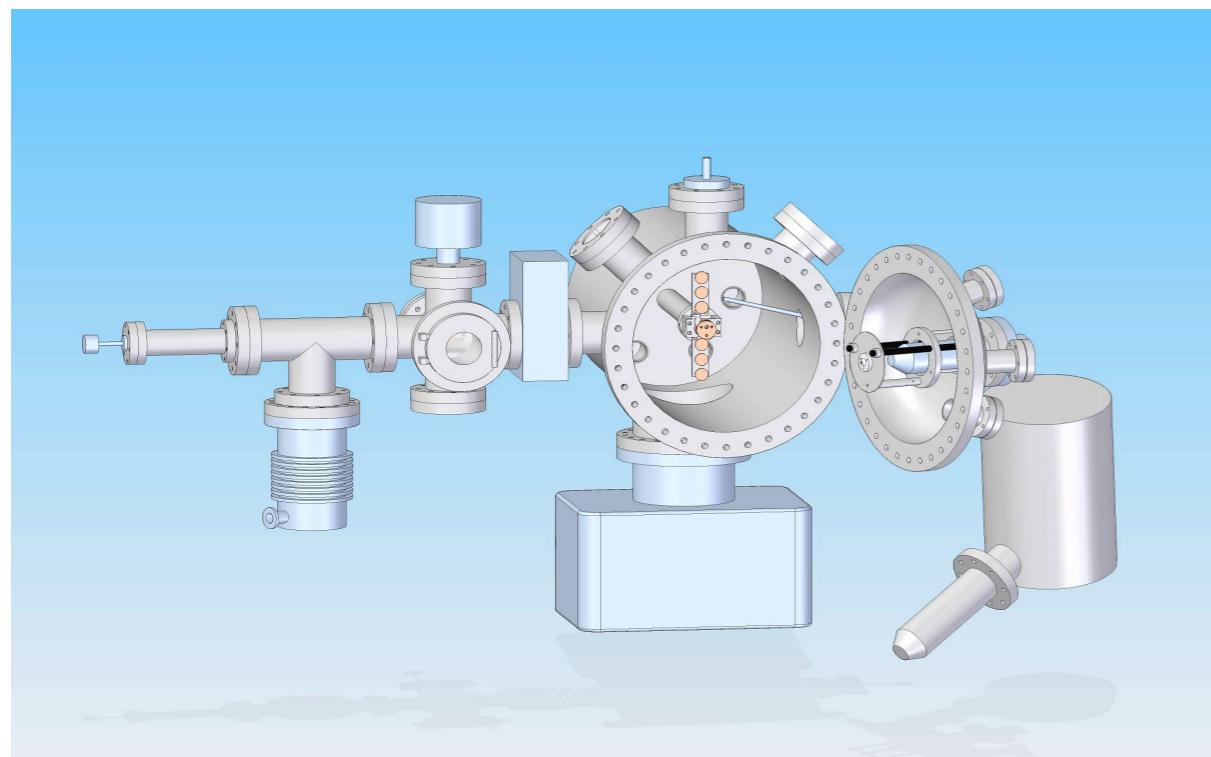


J.Wittschen (Bonn)

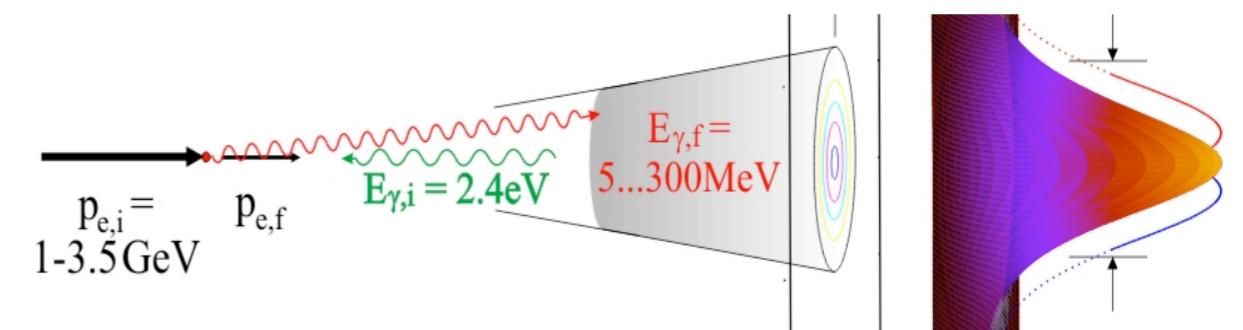
Compton Polarimetry @ ELSA



Measurement of Photoenhanced Field Emission



Using Si-microstrip detectors to measure spatial displacement of backscattered photons



Discussion of Verbundförderung for Terascale Projects

	Koordinator
1. Teilchenquellen [CERN, Ffm, FZD, TU DD]	<u>H. Teichert</u>
2. Strahlinstrumentierung [CERN, FAIR, Ffm, HD, DO, KIT, Uni Wuppertal]	<u>H. Braun</u>
3. Normalleitende Kavitäten [FAIR, Ffm, TEMF, TU DA, Uni Rostock]	<u>P. Hülsmann</u>
4. Supraleitende Kavitäten [CERN, DESY, KP und TEMF TU DA, Ffm, KIT, Uni HH, MPI HD, Uni Rostock, Uni Wuppertal]	<u>W. Weingarten</u>
5. Supraleitende Instrumente [CERN, KIT LMU München]	<u>P. Peiffer</u>
6. Strahl-Material-Wechselwirkungsprozesse u. Diagnose (Wiggler, Undulatoren etc.) [CERN, FAIR, TU DA, Ffm, FZK]	<u>R. Schmidt</u>
7. LHC & FAIR-Kollimatoren in den Ringen [CERN, FAIR, TEMF TU DA, Ffm, Bonn]	<u>R. Assmann</u>
8. Pol. Elektronenstrahlen [Mainz, Bonn, CERN, DESY, Zeuthen]	<u>K.. Aulenbacher</u>
9. Electron Cloud-Effekte [CERN, FAIR, Uni Rostock, KIT, Uni Wuppertal]	<u>F. Zimmermann</u>
10. Rezirkulierende Elektronen-Linacs [TUDA, CERN, Mainz, KIT, BESSY]	<u>S. Müller</u>
11. "Feed Back"-Systeme für Ringe [Uni DO, FAIR, FZJ, Bonn, GSI]	<u>S. Khan</u>
12. HF-Nachbeschleunigung von laserinduzierten Protonenstrahlen [FZ DD, TU DA, Ffm, GSI]	<u>M. Roth</u>
13. Elektron – Nukleon – Kollider [Mainz, FZJ, Bonn, Uni DO]	<u>A. Jankowiak</u>

- many areas are general purpose – adequate for university engagement
- all colored activities have an application at the Terascale
- letters of intend have to come from universities
 - Polarimetry
 - SCRF