

Tuesday 2 December

09:00 **Tutorials: Advanced Tutorial: Hardware Development in MicroTCA** Session 09:00-10:00 **Hardware Design in MicroTCA** Speaker Behzad Boghrati 10:00-10:30 EMI consideration for precision analogue electronics in MicroTCA Speaker Frank Ludwig 10:30 09:00 **Tutorials: Basic Tutorial** Session Introduction 09:00-09:05 Speaker Kay Rehlich 09:05-09:35 The Basics Speaker Ralf Waldt 09:35-10:05 MicroTCA Management Speaker Heiko Koerte 10:05-10:30 Communication links, clocks and triggers Speaker Kay Rehlich 10:30 11:00 Tutorials: Advanced Tutorial: Firmware and Software Frameworks, FWK and ChimeraTK Session 11:00-11:45 **FWK Firmware Framework Speakers** Cagil Guemues, Gianmarco Ricci Rapid hardware integration with the ChimeraTK software framework 11:45-12:30 Speaker Dr Martin Christoph Hierholzer 12:30 11:00 **Tutorials: Timing session Session** 11:00-11:30 The MRF Timing System

Speaker Jukka Pietarir	en
11:30-12:00 Speaker Dietrich Beck	
12:00-12:30	The DESY x2 and x3 Timing Systems
Speaker Victor Andrei	