



Contribution ID: 274

Type: **Talk**

PETRA IV: The ultra-low emittance source project at DESY

Wednesday, 19 September 2018 14:15 (15 minutes)

The PETRA IV project aims at upgrading the present synchrotron radiation source PETRA III at DESY into an ultra-low emittance source. Being diffraction limited up to X-rays of about 10 keV, PETRA IV will be ideal for 3D X-ray microscopy of biological, chemical, and physical processes under realistic conditions at length scales from atomic dimensions to millimetres and time scales down to the sub-nanosecond regime. In this way, it will enable groundbreaking studies in many fields of science and industry, such as health, energy, earth & environment, transport, and information technology. The science case is reviewed and the current state of the conceptual design is summarised.

Primary authors: Prof. SCHROER, Christian G. (DESY / Uni. Hamburg); Dr AGAPOV, Ilya (DESY); Dr BREFELD, Werner (DESY); Dr BRINKMANN, Reinhard (DESY); Dr CHAE, Yong-Chul (DESY); Dr CHAO, Hung-Chun (DESY); Dr ERIKSSON, Mikael (MAX IV Laboratory); Dr KEIL, Joachim (DESY); Dr GAVALDA, Xavier Nuel (DESY); Prof. RÖHLSBERGER, Ralf (DESY / University of Hamburg); Dr SEECK, Oliver; Dr SPRUNG, Michael (DESY); Dr TISCHER, Markus (DESY); Dr WANZENBERG, Rainer (DESY); WECKERT, Edgar (DESY)

Presenter: Prof. SCHROER, Christian G. (DESY / Uni. Hamburg)

Session Classification: Micro symposium 6

Track Classification: MS6 Next generation large scale facilities