Programme Schedule

Monday 20th September 2010

- 15:00 BST  Registration / Welcome Reception
- 15:30  Welcome: Professor Pam Thomas (XTOP 2010 Chair)
- 15:45 – 16:45  Plenary Tutorial I  Chair: Professor Pam Thomas
  Dr Jean Susini (ESRF, France): High-resolution synchrotron-based X-ray imaging: trends and opportunities
- 16:45 – 17:45  Plenary Tutorial II  Chair: Professor Pam Thomas
  Professor Brian Tanner (Durham University, UK): High Resolution X-ray Diffraction and Reflectometry: the same physics - different length scales
- 18:00 – 19:15  Two Minute Poster Presentations I
  Chair: Dr David Walker
- 19:30  Dinner (Rootes Restaurant)
- 20:30  Poster Session I & Mixer (Science Concourse)

Tuesday 21st September 2010

- 09:00 – 10:45  Session I  Coherent Diffraction & Imaging
  Chair: Professor José Baruchel
  o 09:00  Dr Anatoly Snigirev (ESRF, France): In-line X-ray interferometers based on planar refractive lenses
  o 09:30  Dr Alexander Kazimirov (CHESS, Cornell University, USA): New diffraction imaging technique based on focused X-ray beams
  o 09:45  Mr Micheal Schöbel (Technical University Vienna, Austria): Internal stresses and voids in SiC-particle reinforced Aluminum for heat sink applications
  o 10:00  Dr Wen Hu (Kansai Photon Science Institute, Japanese Atomic Energy Agency): Direct observation of higher order atomistic structure in Ti$_{50}$Ni$_{44}$Fe$_{6}$ at lower temperature phase
  o 10:15  Dr Martin Dierolf (Technical University Munich, Germany): Ptychographic coherent diffractive imaging in two and three dimensions
- 10:45  Coffee Break
- 11:15 – 12:30  Session II  Industrial Applications
  Chair: Dr Paul Fewster
  o 11:15  Dr Edward Mitchell (ESRF, France): Industrial applications at the European Synchrotron radiation facility: from catalysts to ice cream
  o 11:45  Dr Paul Ryan (Jordan Valley Semiconductors, UK): Production metrology of advanced LED structures using high-resolution X-ray diffraction
  o 12:00  Professor Mike Dudley (Stony Brook University, USA): Industrial applications of synchrotron X-ray topography
- 12:45  Buffet Lunch (Science Concourse)
- 13:45 – 15:45  Two Minute Poster Presentations II.
  Chair: Dr Tom Hase
Programme Schedule

Tuesday 21st September Continued...

- **15:45**  
  Tea Break

- **16:15 – 18:00**  
  **Session III**  
  **Nanomaterials**
  
  **Chair:** Professor Julian Stangl
  
  - **16:15**  
    Dr Virginie Chamard (CNRS, France): *Three-dimensional X-ray fourier transform holography: the Bragg case*
  
  - **16:45**  
    Mr Andreas Biermanns (University of Siegen, Germany): *X-ray characterization of Au-free grown GaAs nanowires on Si*
  
  - **17:00**  
    Dr Oleksandr Yefanov (DESY, Germany): *Orientation determination in single particle X-ray coherent imaging*
  
  - **17:15**  
    Mr Eugune Wintersberger (Johannes Kepler University, Linz, Austria): *Fast methods for 3D simulations of X-ray diffraction data from nano-structures*
  
  - **17:30**  
    Dr Heikki Suhonen (ESRF, France): *Hard X-ray phase contrast tomography of nano-scale materials*

- **18:30**  
  Dinner (Rootes Restaurant)

- **20:00**  
  Poster Session II (Science Concourse)

**Wednesday 22nd September 2010**

- **09:00 – 10:30**  
  **Session IV**  
  **Advances in Laboratory-based Diffraction & Imaging**
  
  **Chair:** Professor Vaclav Holý
  
  - **09:00**  
    Dr Martin Bech (Technical University Munich, Germany): *Developments in grating based X-ray dark-field and phase-contrast imaging using laboratory sources*
  
  - **09:30**  
    Mr Karol Vegso (Institute of Physics, SAS, Bratislava, Slovakia): *Phase transitions in Ag nanoparticle langmuir film studied with novel table-top GISAXS setup*
  
  - **09:45**  
    Miss Jennifer Stopford (Dublin City University, Ireland): *Three dimensional X-ray diffraction imaging of damage to silicon wafers*
  
  - **10:00**  
    Dr Peter Zaumseil (IHP, Frankfurt, Germany): *Laboratory-based characterization of Ge epitaxially grown on nano-structured Si (001) wafers*

- **10:30**  
  Coffee Break

- **11:00 – 12:35**  
  **Session V**  
  **Non-Ambient Studies**
  
  **Chair:** Professor Keith Bowen
  
  - **11:00**  
    Dr Andreas Danilewsky (Freiburg University, Germany): *In-situ high temperature X-ray diffraction imaging of dislocation dynamics in silicon*
  
  - **11:30**  
    Dr Tobias Schülli (ESRF, France): *Substrate-enhanced supercooling in AuSi droplets*
  
  - **12:00**  
    Mr Tomy dos santos Rolo (ANKA-ISS, KIT, Germany): *High speed microtomography at ANKA: implementation and first applications*
  
  - **12:15**  
    Professor Pam Thomas & Dr David Walker (University of Warwick, UK): Optical & X-ray topography study of self-organised domains in BaTiO₃

- **13:00**  
  Buffet Lunch & XTOP Committee Meeting
Programme Schedule

Wednesday 22nd September Continued...

- **14:30 – 16:00**  
  **Session VI**  
  **Surface & Interface Studies**  
  **Chair:** Professor Ulrich Pietsch
  - **14:30** Dr Frédéric Livet (Simap-Phelma, Grenoble, France): *Experimental study of surfaces by coherent X-ray diffraction*
  - **15:00** Dr Souren Grigorian (University of Siegen, Germany): *Correlation between structure, morphology and device performance of conjugated poly(thiophene) films*
  - **15:15** Dr Oier Bikondoa (ESRF, France): *Slow dynamics of ion induced nanopattern formation on GaSb(001)*
  - **15:30** Dr Alessia Cedola (IFN-CNR, Rome, Italy): *X-ray micro-diffraction imaging: a new tool to study biomaterials for tissue engineering*

- **16:00**  
  **Tea Break**

- **16:30 – 17:30**  
  **Plenary III**  
  **Chair:** TBC  
  **Professor Morton Moore (Royal Holloway, UK):** *Imaging diamond with X-rays*

- **17:30**  
  **XTOP 2010 Delegate Photo** (Venue TBC)

- **19:00**  
  **Conference Dinner (Panorama Suite)**

**Thursday 23rd September 2010**

- **9:30 – 11:00**  
  **Session VII**  
  **Diffraction, Spectroscopy & Resonant Scattering**  
  **Chair:** Professor Steve Collins
  - **09:30** Dr Vladimir Dmitrienko (A.V. Shubnikov Institute of Crystallography, Moscow, Russia): *Combining near-edge absorption and resonant diffraction for crystal studies*
  - **10:00** Mr Lucas Horák (Charles University, Prague, Czech Republic): *Study of Mn interstitials in GaMnAs using high-resolution X-ray diffraction*
  - **10:15** Professor Sergio L Morelhão (University of Sao Paulo, Brazil): *Accurate X-ray phase measurements with genetic algorithm: applications in doped NLO crystals*
  - **10:30** Professor Mark Dowsett (University of Warwick, UK): *Synchrotron Techniques for the Conservation of Heritage Metals*

- **11:00**  
  **Coffee Break**

- **11:30 – 12:45**  
  **Session VIII**  
  **Coherent Diffraction & Imaging II**  
  **Chair:** Professor Franz Pfeiffer
  - **11:30** Dr André Beerlink (University of Göttingen, Germany): *Hard X-Ray phase contrast Imaging of Black Lipid Membranes*
  - **12:00** Dr Ralf Hofmann (Karlsruhe Institute for Technology, Germany): *Foundations of perturbative phase retrieval for single-distance radiogram*
  - **12:15** Dr Tamzin Lafford (ESRF, France): *Investigation by coherent X-ray section topography of ferroelectric domain behaviour as a function of temperature in periodically poled Rb:KTP crystals*
  - **12:30** Ms Venera Altapova (Karlsruhe Institute for Technology, Germany): *Phase-contrast imaging with a grating interferometer at ANKA*

- **12:45**  
  **Closing Remarks:** Professor Pam Thomas (XTOP 2010 Chair)

- **13:00**  
  **Close + Optional Lunch**