## **Conference Programme**

# Wednesday 12th September

Recommended location to eat for those staying overnight. Meeting in pub contact Martin Turner 07970 132 621

## Thursday 13th September

Location ISIC

09:15: Registration desk opens

09:45 - 10:45: Welcome to TP.CG'12 and introduction to ISIC, Jon Blower 10:00 - 10:45: Keynote 1: Pascal Lecomte, ESA (European Space Agency) "Problems in Visualizing Climate Change Initiative (CCI) Data"

10:45 - 11:15: Coffee

11:15 - 13:00: Session 1: "HDR / HW"

- 1. "Backwards Compatible JPEG Stereoscopic High Dynamic Range Imaging" Selmanovic Elmedin, Kurt Debattista, Thomas Bashford-Rogers (University of Warwick)
- 2. "Physical and perceptual limitations of a projector-based high dynamic range display" Robert Wanat, Josselin Petit (Bangor University)
- 3. "Light clustering for Dynamic Image Based Lighting" Sam Staton, Kurt Debattista, Thomas Bashford-Rogers, Alan Chalmers (Warwick Digital Laboratory, University of Warwick)
- 4. "Path Tracing on Massively Parallel Neuromorphic Hardware" Paul Richmond, David J Allerton (Department of Automatic Control Systems Engineering, University of Sheffield)

13:00 - 14:00: Lunch

10 min pre-lunch Sponsor Presentation: HARP HyperWall show-and-tell, Adrian Gould

14:00 - 15:45: Session 2: Applications

- 1. "Using Quest3D to develop VES: a tool for enhancing electrical safety and design in the built environment" Martin Barrett (DIT)
- 2. "Simplified User Interface for Architectural Reconstruction" Fabian Wanner, Fabrizio Pece, Jan Kautz (University College London)
- 3. "Large Scale Pedestrian Multi-Simulation for a Decision Support Tool" Twin Karmakharm, Paul Richmond (University of Sheffield)
- 4. "ViewFusion: Correlating Structure and Activity Views for Execution Traces" Jonas Truemper, Alexandru Telea, Juergen Doellner (Hasso-Plattner-Institute)

15:45 - 16:15: Coffee

16:15 - 16:40: Keynote 2: Dr Katherine J. Dobson, Manchester X-ray Imaging Facility, School of Materials, Research Complex at Harwell, Didcot, Oxfordshire, UK "Seeing the unseeable – X-ray tomography and 3D visualisation in current research"

16:40 - 17:45: Diamond Light Source Tour and pre-dinner drinks in Diamond Reception

18:45 - 19:15: Transit time

19:15 - late: Private Dining at The Kingswell

(Reading Road, Harwell, Oxon, OX11 0LZ Tel: 01235 833043 www.kingswell-hotel.com) "Latest Developments from STFC Daresbury" – after-dinner talk: Terry Hewitt.

#### Friday 14th September

Location RAL R18 (Exhibition)

9:15 - 9:20: Introduction to RAL

9:20 - 10:00: Facilities Special Talk

- 1. "Laser Imaging Facilities in the Research Complex at Harwell" Dave Clarke (RAL/STFC)
- 2. The CCPi (Tomographic Imaging) and HIP (Harwell Imaging Partnership): Martin Turner (University of Manchester)
- 3. Hartree Computational Facility Terry Hewitt (WTH Associates Ltd.)

10:00 - 10:30: Coffee

10:30 - 12:15: Session 3: Visualization

- 1. "Advanced, Automatic Stream Surface Seeding and Filtering" Matt Edmunds (Swansea University, Wales, UK.), Robert S Laramee (Swansea University, Wales, UK.), Guoning Chen (University of Utah, US.), Nelson Max (University of California, Davis, US.), Eugene Zhang (Oregon State University, US.)
- 2. "A Framework for the Interactive Feature Specification and Quantitative Exploration and Analysis of Multivariate Volumetric Scalar Data and Their Uncertainties" Ma, Ji (University College Cork)
- 3. "Hardware Accelerated Medical Data Visualisation on the Web" Hui, Wei, Gordon Clapworthy (Dept. of Computer Science and Technology, University of Bedfordshire)
- 4. "Visualizing a Spherical Geological Discrete Element Model of Fault Evolution" Stephen Longshaw, Martin Turner, Finch Emma (The University of Manchester)

12:15 -: Lunch

5 min pre-lunch ViCoX streaming from Manchester (Louise Lever)

13:00 - 13:30: EGUK AGM

13:30 - 15:00: Session 4: Geometry

#### EGUK Conference on the Theory and Practice of Computer Graphics (TP.CG) 2012

- 1. "Fast scalable k-NN computation for very large point clouds" Sandro Spina, Keith Bugeja, (University of Malta), Kurt Debattista, Alan Chalmers (Warwick Digital Laboratory, University of Warwick)
- 2. "On the Fractal Behaviour of AA Patterns" Abdalla Ahmed (Sudatel Telecom Group)
- 3. "Computing Curve Skeletons from Medial Surfaces of 3D Shapes" Andrei Jalba, Alexandru Telea, (Institute Johann Bernoulli)

15:00 - 15:30: Coffee

15:30 - 16:30: Keynote 3: Dr Anna Bentkowska-Kafel, Department of Digital Humanities, King's College London, UK

"Who Needs Paradata?"

Includes: Mini-book launch: Paradata and Transparency in Virtual Heritage (Digital Research in the Arts and Humanities 2012), Ashgate Publishing Ltd Anna Bentkowska-Kafel, Hugh Denard, Drew Baker

16:30: Wrap-up, prize-giving and close

16:30 - 16:35: TP.CG'13 in Bath and TP.CG'14 in Leeds

16:35 - 16:40: EG'13 in Girona by Gustov Patow

16:40 - 16:50: Prizes 16:50 - 17:00: Goodbyes