

# Multidisciplinary Workshop: Visual/Image Data Analysis in Science, October 8-9, 2014 PROGRAMME

## DAY 1: Wednesday, October 8

### I – Our Mind as an Observer – From the Subject to the Object

(Session Chair: Seppo Vainio, BCO-DP)

- 09.00-09.20 *Opening and Welcome words by the Rector of the University of Oulu*  
**Lauri Lajunen and Seppo Vainio**
- 09.20-09.30 *Music and visual performance*  
**Timo Kiiskinen**
- 09.30-10.00 *Images and Their Impact on the Viewer: A Filmmaker's Perspective*  
**Sampsa Huttunen**, Reactor Films Ltd.
- 10.00-10.30 *Philosophy of Vision*  
**José Filipe Silva**, University of Helsinki, Helsinki Collegium for Advanced Studies
- 10.30-11.00 **Coffee break**
- 11.00-11.45 *Mind as an Interpreter of the World & How We Feel & Interpret Music as Images/ Synesthesia*  
**Mikko Sams**, Aalto University, Helsinki
- 11.45-12.00 *Visualisation of Deviance and Insanity*  
**Petteri Pietikäinen**, University of Oulu
- 12.00-13.00 **Lunch break**

### II – From Atoms to Individual Views of Life

(Session Chair: Miika Nieminen, MRC-Oulu DP)

- 13.00-13.10 Sponsor time slot (Immuno Diagnostic Oy/ Sanna Siltanen)
- 13.10-13.40 *Visualization of Biomolecules of Life: From Atoms to Function*  
**Tiina A. Salminen**, Åbo Akademi, Turku
- 13.40-13.55 *Microscopic Biomedical Imaging: From Cells to Tissues*  
**Veli-Pekka Ronkainen**, University of Oulu
- 13.55-14.10 *Magnetic Resonance Imaging of Materials, Flow and Chemical Reactions*  
**Ville-Veikko Telkki**, University of Oulu
- 14.10-14.25 *4D Imaging of Neural Networks in Humans Using Ultrafast Magnetic Resonance Imaging*  
**Vesa Kiviniemi**, University of Oulu
- 14.25-14.40 *Micro-level Imaging of Local Structure and Composition of Tissues in 2D and 3D*  
**Simo Saarakkala**, University of Oulu
- 14.40-15.10 *From Visual to Physical – 3D-Printing*  
**Jouni Partanen**, Aalto University, Helsinki
- 15.10-15.30 **Break**
- 15.30-19.00 **Interaction programme with discussions, own data exhibitions, social networking, snacks - For pre-registered participants and speakers**

## DAY 2: Thursday, October 9

### III – Imaging and Visualization: Technologies and Human Activities

(Session Chair: Janne Heikkilä, InfoTech-DP)

- 09.00-09.15 *Photoacoustics, Principles and Applications*  
**Matti Kinnunen**, University of Oulu
- 09.15-09.30 *Visualization of Social Networks*  
**Vassilis Kostakos**, University of Oulu
- 09.30-10.00 *Evolution of Data Economy*  
**Mika Pantzar**, National Consumer Research Centre, Helsinki
- 10.00-10.10 Sponsor time slot (Hamamatsu Photonics Norden AB/ Mats Hede)

### IV – Taking a Look of the Real Worlds: Earth and Beyond

(Session Chair: Anita Aikio, Exactus-DP)

- 10.10-10.25 *Images as an Entry Code to the Past Worlds/ Archaeology*  
**Jari Okkonen**, University of Oulu
- 10.25-10.40 *Visualization in Geography*  
**Janne Alahuhta**, University of Oulu
- 10.40-11.05 **Coffee break**
- 11.05-11.15 Sponsor time slot (Cheos Oy/ Kim Grundström)
- 11.15-11.30 *Space-based Imaging of the Solar System*  
**Jürgen Schmidt**, University of Oulu
- 11.30-12.00 *Mathematics of Imaging*  
**Fredrik Kahl**, Lund University, Sweden
- 12.00-12.15 *Computational Photography: Going beyond the Conventional Imaging*  
**Janne Heikkilä**, University of Oulu
- 12.15-12.35 *Spectral Imaging and Perception*  
**Esko Herrala**, SPECIM Spectral Imaging Ltd.
- 12.35-12.50 *The Structure and Evolution of the Cosmos through Imaging and Visualization*  
**Pertti Rautiainen**, University of Oulu
- 12.50-13.45 **Lunch break**

### V – Insight into the Land of Dreams – the Virtuality

(Session Chair: Seppo Vainio, BCO-DP)

- 13.45-14.05 *3D Oulu and Transfer of Visions to Architectures*  
**Ilpo Okkonen**, Studio Ilpo Okkonen, Oulu
- 14.05-14.35 *3D Media*  
**Atanas Gotchev**, Tampere University of Technology
- 14.35-15.05 *Visual World of Games*  
**Tony Manninen**, LudoCraft Ltd.
- 15.05-16.00 General discussion, feedback & closing words

