

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

