

Institute of Cybernetics Autumn Workshop 2012: Technical Programme

Friday, Nov 9

10:00 Arrival, coffee

10:30 - 11:50 Control Systems

- Seshadhri Srinivasan “Predictive smart thermostat controller”
- Vadim Kaparin “Extended observer form for discrete-time nonlinear control systems”
- Ülo Nurges “On the fixed order stabilizing controller design by reflection segments approach”
- Sven Nõmm TBA

11:50 - 12:30 Phonetics and Speech Technology

- Kairit Sirts “A Model Selection Method for Minimally-Supervised Learning of Morphological Segmentations”
- Rena Nemoto “Prosodic Patterns of Estonian words: Corpus-Based Study using Spontaneous Speech”

Lunch

14:00 - 15:10 Systems Biology

- Jelena Branovets “Structural and energetic modifications in cardiomyocytes from mice with modified creatine kinase system”
- Natalja Jepihhina “Permeabilized rat cardiomyocyte response demonstrates intracellular origin of diffusion obstacles”
- Päivo Simson “Extracting intracellular information from molecular fluctuations”

15:10 - 15:30 Photoelasticity

- Johan Anton “Stress measurement in chemically tempered glass”

Coffee break

16:00 - 17:30 Guest speaker: Priit Ennet

Spa

20:00 Dinner

Spa, bar, etc

Saturday, Nov 10

09:00 - 10:30 Wave Engineering

- Tarmo Soomere “Applications of wave dynamics and Lagrangian transport for coastal engineering and management”
- Tomas Torsvik “Lagrangian particle tracking – influence of particle diffusion”
- Irina Nikolkina “Wave climate in Peipsi Lake”
- Elena Averbukh “Dynamics of long waves and their surface manifestations”
- Andrea Giudici “On the compressibility of surface currents in the Gulf of Finland: theoretical foundations and new results on a 1nm model”

Coffee break

11:00 - 13:00 Mechanics

- Jüri Engelbrecht “Complex dynamical processes in solids and tissues”
- Jaan Kalda “Turbulent mixing: simple yet complex”
- Heiko Herrmann, Marika Eik “Methodology and micromechanical modelling of fibre orientations in SFRC”
- Arvi Ravasoo “Quo vadis, acoustodiagnostics”
- Dmitri Kartofelev “Musical instruments and nonlinearly supported strings”
- Ivan Sertakov “2D waves in microstructured solids”

Lunch

14:00 - 14:20 Computer Science

- Silvio Capobianco “Cellular automata and the Tarski alternative: A balanced account”

14:20 - 15:00 Software

- Pavel Grigorenko “A Semantic Method of Automatic Composition of E-government Services”
- Kristiina Kindel “Communication Channel Choice between Enterprises and Government”

15:00 - 16:00 Bibliometrics

- Tarmo Uustalu “Science and alchemy”
- Open debate on bibliometrics
- Ending