

Kübl sügisseminar 2011

12.-13. november, Viinistul

Laupäev 12. november

Saabumine Viinistule 10:30

11:00–12:30 Sessioon 1: Fotoelastsus ja süsteembioloogia (Marko Vendelin)

- **Hillar Aben, Johan Anton, Pilvi Veeber** "Why does a neutrino observatory need photoelasticity?"
- **Andrei Errapart** "A hybrid mechanics algorithm in photoelastic tomography of axisymmetric stress fields"
- **Marko Vendelin** "Introduction of Systems Biology Laboratory"
- **Ardo Illaste** "Analysis of molecular movements reveals obstructions to diffusion in cardiac muscle cells"
- **Jaanus Karo** "Towards the Coarse-Grained Molecular Dynamics Model of Energy Transfer Pathways in Mitochondria"

Lõunapaus

14:00–15:30 Külaline (**Ants Juske** räägib Eesti kunstist Viinistu kunstimuuseumis).

16:00–17:00 Sessioon 2: Lainetuse dünaamika (Tarmo Soomere)

- **Tarmo Soomere** "Introduction of Wave Engineering Laboratory"
- **Ewald Quak** "The Baltic Way Project - Experiences and Results"
- **Andrea Giudici** "Compressibility of the surface currents created by nonlinear waves"
- **Artem Rodin** "Transformation of strongly nonlinear wave on shallow water"
- **Maija Viška** "Sediment transport patterns along the eastern Baltic Sea coast"

Kohvipaus

17:30–18:00 Sessioon 3: Rakendusmatemaatika (Jaan Janno)

- **Jaan Janno** "Introduction of Mathematics Group"
- **Anna Šeletski** "Comparison of summability methods by summability fields, speeds of convergence and statistical convergence in a Riesz-type family"

18:00–19:30 Sessioon 4: Kõne- ja tarkvaratehnika (Ahto Kalja)

- **Tanel Alumäe** "New Estonian Speech Recognition Applications"
- **Ahto Kalja** "Introduction of Modeling and simulation group"
- **Margarita Spitsakova** "A gravitational search algorithm"
- **Vahur Kotkas** "A CAD system for designing naturally curved wooden floors"

Õhtusöök

20:30 -... Saun & muud lõbustused (kui ollakse veel suutelised)

Pühapäev, 13. november

Hommikusöök

9:00–10:30 Sessioon 5: Juhtimissüsteemid (Ülle Kotta)

- **Ülle Kotta** "Introduction of Control Systems Department"
- **Maris Tõnso** "On applicability of LPV tools for bilinear control systems"
- **Juri Belikov** "Model Matching Problem for Discrete-time Nonlinear Systems: Transfer Function Approach"
- **Arvo Kaldmäe** "Dynamic Measurement Feedback in Discrete-time Nonlinear Control Systems"
- **Sven Nõmm** "Structure Identification of NN-ANARX Model by Genetic Algorithm with Combined Cross-correlation-test Based Evaluation Function"

Kohvipaus

11:00–12:00 Sessioon 6: Loogika ja semantika (James Chapman)

- **James Chapman** "Introduction to the Logic and Semantics Group"
- **Wolfgang Jeltsch** "Using logic for programming reactive systems"
- **Andri Saar** "Creating a distributed backend for the ABS language"
- **Silvio Capobianco** "Cellular automata: computation with an eye to physics"

Lõunapaus

14:00–15:30 Sessioon 7: Mittelineaarsete nähtuste modelleerimine (Jüri Engelbrecht)

- **J.Engelbrecht** "Sissejuhatus: CENSi tööplaanist/Introduction: On the Workplan of CENS"
- **R.Kitt** "Komplekssed sotsiaalsüsteemid / Comlex Social Systems"
- **H.Herrmann** "Mesomehaanika probleemidest / On Problems of Mesomechanics"
- **I.Mandre** "Monte-Carlo meetodi rakendamine statistilises topograafias" / "Monte-Carlo Simulations of Statistical Topography"
- **D.Kartofelev** "Deformatsioonilained vildis" / "Deformation waves in wool felt"
- **T.Peets** "Mikrostruktur ja dispercioon" / "Microstructure and dispersion"

15:30– ... *Kokkuvõte & lõpukohv & ärasõit*