Listopadové kalendárium

4. T. Brereton: **Stochastic modeling of organic semiconductors and their charge transport properties**

12. A. Přenosil: **Reductio ad contradictionem an algebraic perspective**

18. F. Dohnálek: **Odhady hustot Minkowského funkcionálů pro nadúrovňové množiny Gaussovských procesů**

19. M. Daniel, Jianbing Ma: **Conflict of Belief Functions: Continuity and Frame Resizement**

Odborná skupina aplikované matematické logiky

Vás zve na semináře, které se konají vždy **ve středu** ve 14 hodin v zasedacím sále Ústavu informatiky AV ČR (místnost č. 318), Pod Vodárenskou věží 2, 182 07 Praha 8 – Libeň, stanice metra C Ládví.

Program:

12. listopadu **Adam Přenosil: Reductio ad contradictionem an algebraic perspective**

When reasoning from potentially inconsistent premises, it is useful to have a logic which does not collapse into triviality in the face of contradiction. Probably the best known such logic is the four-valued logic introduced by Belnap and Dunn, which is essentially the equational logic of de Morgan algebras. This logic take consistent and inconsistent theories to be on equal footing. However, perhaps this is a step too far: we want to be able to use contradictory premises in our reasoning while still acknowledging their inconsistency. In order to talk about inconsistency in the object language, we expand the Belnap-Dunn logic by a unary connective representing reductio ad contradictionem. We define the corresponding variety of algebras, which we call reductio algebras, and establish that it is locally finite and has equationally definable principal congruences. We then use finite duality theory to describe the (uncountable) lattice of varieties of reductio algebras in simple graph-theoretic terms.

19. listopadu **Milan Daniel, Jianbing Ma: Conflict of Belief Functions: Continuity and Frame Resizement**

Preliminaries of belief functions and basic ideas and properties of plausibility and pignistic conflicts of belief functions will be recalled. These measures of conflict are based on two different probability transformations of belief functions, the normalised plausibility of singletons and Smets' pignistic probability.
The seminar will be focused on continuity property and relationship of these conflict measures to extension and refinement of a frame of discernment; on the results which were presented by Milan Daniel and Jianbing Ma at the conference SUM 2014.
A new continuous improvement of both the measures which is preserved by a frame extension will be introduced. A relationship of the new conflict measures to refinement of a frame of discernment will be also discussed. Finally a comparison between the new measures and two original measures as well as a comparison to Weiru Liu's degree of conflict will be presented.

Odborná skupina pro stereologii

vás zve na *Seminář ze stochastické geometrie*.
Na semináři jsou referovány nové nebo aktuální výsledky z oboru stochastické geometrie, integrální geometrie, geometrické pravděpodobnosti, geometrické statistiky a stereologie.
Seminář se koná v úterý od 15:40 do 17:10 v seminární místnosti Katedry pravděpodobnosti a matematické statistiky MFF UK (Karlín, Sokolovská 83, 1. patro). Zájemci jsou srdečně zváni.

Program:

4. listopadu **Tim Brereton** (University Ulm)**: Stochastic modeling of organic semiconductors and their charge transport properties**

18. listopadu **Filip Dohnálek** (MFF UK)**: Odhady hustot Minkowského funkcionálů pro nadúrovňové množiny Gaussovských procesů**

Volná místa

Georgia Institute of Technology, USA

Applicants are sought for a post-doc position with the School of Aerospace Engineering and the Institute for Robotics and Intelligent Machines (IRIM) at the Georgia Institute of Technology in the general area of stochastic optimal control and information theory.

The successful candidate should have a solid background and excellent analytical skills in at least one (or all) of the following areas: stochastic calculus, information theory, control and statistical inference.

Interested candidates should submit their application by email in a single pdf file to Prof. Panagiotis Tsiotras (email: tsiotras@gatech.edu) or Prof. Evangelos A. Theodorou (email: evangelos.theodorou@ae.gatech.edu).

The application should include the following documents: 1. A complete curriculum vitae. 2. A list with the names of at least 3 references. 3. A one-page summary of past research accomplishments and current research interests. 4. A selection of (no more than five) publications (published, accepted, or in-preparation).

The Daniel Guggenheim School of Aerospace Engineering at the Georgia Institute of Technology is one of the oldest and largest educational programs of its kind in the country. It ranks among the top aerospace programs in the US, and enjoys a worldwide reputation. The School has currently 43 faculty members and about 50 professional staff members. Approximately 800 undergraduate and 500 graduate students are currently enrolled in the program. The Institute of Robotics and Intelligent Machines at Georgia Tech (IRIM) involves more than 70 faculty and staff from the College of Engineering, the College of Computing and the Georgia Tech Research Institute working on interdisciplinary problems in robotics and autonomous systems. For more information on IRIM please see http://robotics.gatech.edu.

Polytechnique Montréal, Canada

The Department of Electrical Engineering at Polytechnique Montreal invites applicants for a tenure-track position at the rank of Assistant or Associate Professor.

The areas of interest are:

Power systems: electromagnetic and electromechanical transients, load-flow, numerical methods for simulation and analysis of power systems from steady-state to electromagnetic transients, wideband models, real-time and off-line simulation methods, computer hardware, and architectures for accelerated computations; applications to large scale power transmission and distribution systems, the Smart Grid, power system protection, and integration of renewable energies.

Power electronics, rotating machines and transformers: advanced wideband modeling, numerical methods for the simulation of varying topology systems, real-time and off-line simulation; applications to wind turbine generators, renewable energies, the Smart Grid, FACTS, HVDC links, and electromagnetic transients in general.

Polytechnique Montreal is a French speaking institution. Candidates should have a working knowledge of that language. For further information, please see http://www.polymtl.ca/rensgen/en/offresemp/index.php

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