

Ústav informatiky

Akademie věd České republiky

Pod Vodárenskou věží 2, 182 07 Praha 8

ÚI AV ČR ve spolupráci s Odbornou skupinou aplikované matematické logiky České společnosti
pro kybernetiku a informatiku

pořádá

v seminární místnosti ÚI AV ČR - místnost č. 318
(stanice metra C Ládví)

Seminář aplikované matematické logiky

který se schází **ve středu ve 14.00 hod.**

Program na duben 2013:

10. 4. 2013 - *Wiesław Kubiś:*

Universal homogeneous objects

We shall survey category-theoretic framework for studying universal homogeneous structures. The main concept is a “Fraïssé sequence”, a special functor from the set of natural numbers into a fixed category.

The talk is based mostly on the preprint W. Kubiś, Fraïssé sequences: category-theoretic approach to universal homogeneous structures

[<http://arxiv.org/abs/0711.1683>]

17. 4. 2013 - *Milan Daniel:*

Towards a Conflicting Part of a Belief Function

Belief functions usually contain some internal conflict. Based on Hájek-Valdés algebraic analysis of belief functions, a unique decomposition of a belief function into its conflicting and non-conflicting part was introduced at ISIPTA'11 symposium for belief functions defined on two-element frame of discernment. Current presentation studies the conditions under which such a decomposition exists for belief functions defined on three-element frame.

24. 4. 2013 - *Paolo Baldi:*

A proof theoretical approach to standard completeness

Standard completeness, that is completeness of a logic with respect to algebras based on $[0,1]$, is one of the major issue in Mathematical Fuzzy logic. A proof-theoretical approach to the problem has been developed in recent years (see, e.g. [1], [2]), and is based on so-called Density elimination. We will show some recent results on Density-elimination for Hypersequent Calculi, thus providing general proofs of standard completeness for classes of axiomatic extensions of MTL (Monoidal t-norm logic) and UL (Uninorm logic).

[1] A. Ciabattoni and G. Metcalfe. Density elimination. *Theor. Comput. Sci.*, 403(2–3):328–346, 2008.

[2] G. Metcalfe, F. Montagna. Substructural fuzzy logics. *Journal of Symbolic Logic*, 7(3):834–864, 2007.