Ústav informatiky
Akademie věd České republiky

Pod Vodárenskou věží 2, 182 07 Praha 8

ÚI AV ČR ve spolupráci s Odbornou skupinou pro logiku, pravděpodobnost a usuzování
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 v 16.00 hod.**

Program na leden 2020:

22. 1.   *Guillermo Badia, University of Queensland*
**Ehrenfeucht-Fraisse methods in the model theory
of L-topological spaces over finite MTL-chains**

Lattice-valued topological spaces were introduced by Goguen in the 1970s, as a generalization of Chang's fuzzy topological spaces. The intuitive idea is simply to study topologies where the open sets are "fuzzy" or lattice-valued, instead of crisp. Second-order languages to study topological spaces have been studied for classical logic in the past, so in this talk I'll introduce a second-order language over lattice-valued structures to study lattice-valued topological spaces. I will present some of the model-theoretic properties of said language, focusing on characterizations of expressivity via an Ehrenfeucht-Fraisse theorem. Some technical restrictions are necessary to get a well-behaved general model theory here: the lattice must be finite. In this talk, I consider only MTL algebras, but it is possible that this further restriction can be relaxed.

Další informace o semináři naleznete na `http://www.cs.cas.cz/logics/seminar.html`.