Workshop at NU-FIRST WORLD LOGIC DAY, JANUARY 14, 2019.

Date: 14 January 2019 (13:30-18:00)
Venue: Room 9.105, 9 block, Nazarbayev University
Speakers:
Prof.Tusuppov Jamalbek (L.N.Gumilyov Eurasian National University)
Prof.Yerzhan Baisalov (L.N.Gumilyov Eurasian National University)
Prof.Bekenov Makhsut (L.N.Gumilyov Eurasian National University)

Prof. Ahti-Veikko Pietarinen (Nazarbayev University)
Prof.Manat Mustafa (Nazarbayev University)

Dr.Ainur Basheeva (L.N.Gumilyov Eurasian National University)

PROGRAMME:

13:30-14:10	Tusuppov Jamalbek
	Categoricity and complexity of relations over algebraic structures
14:10-14:50	Bekenov Makhsut
	Spectral function by elementary embeddability of models for theories of a countable first-order language
14:50-15:30	Baisalov Yerzhan
	Some open problems in Model Theory
15:30-16:00	Coffee break
	Title
16:00-16:40	Ahti-Veikko Pietarinen
	Intuitionistic and co-intuitionistic graphs
16:40-17:20	Ainur Basheeva
	Equational bases of algebraic structures
17:20-	Manat Mustafa

18:00

Computable numberings.

ABSTRACTS

Title: Categoricity and complexity of relations over algebraic structures
Speaker: Tusuppov Jamalbek
Abstract: We consider the next generalized problems:

1. The problem of Goncharov S.S. and Manasse M.S. -- "The problem of characterization of relative categoricity in hyperarithmetical hierarchies by given levels of complexity of Scott families" and "The problem of connection of relative categoricity of computable presentations and abstract presentations".
2. The problem of Ash C.J. and Nerode A.--"The problem of connection between relations of bounded complexity in hyperarithmetical hierarchies on different presentations and definability of relations by formulas of given complexity"..

Reference:

1. J. Chisholm, E. B. Fokina, S.S. Goncharov, V. S. Harizanov, J. F. Knight, and S. Miller. Intrinsic bounds on complexity and definability at limit levels // J. of Symbolic Logic, Vol.74, No.3,2009, pp.1047-1060.

2. Goncharov S. S., Isomorphisms and definable relations on Computable Models // Proceeding of the Logic Colloquium 2005, Athens}, pp.26—45

Title:

Speaker: Ahti-Veikko Pietarinen

Abstract

Reference:

Title:
Speaker: Yerzhan Baisalov
Abstract
Reference:

Title:

Speaker: Bekenov Makhsut

Abstract Will present research on the properties of theories and structures of their models using the classical Vaught-Robinson methods, relationships of models for elementary embeddability.

Reference:

Title:
Speaker: Ainur Basheeva
Abstract: In this talk we discuss the questions of independent axiomatization of quasivarieties of algebraic structures and the complexity of structures of quasivarieties. We focus on the investigation of infinite bases of quasi-identities and structural complexity of quasivariety lattices of various classical classes of algebras. In particular, quasivarieties with independent bases of quasi-identities, with ω - independent bases of quasi-identities, with recursive bases of quasi-identities will be considered. We also discuss the decidability of quasi-equational theories of these quasivarieties and the finite membership problem.

Title:
Speaker: Manat Mustafa
Abstract: