

Annual Reporting Session of the Department of Algebra and Logic  
December 18, 2020  
Program

9:30 – 9:50 Opening

9:50 – 10:20 Vesselin Drensky: New examples of fundamental algebras (joint project with Luisa Carini, University of Messina, Italy)

10:20 – 10:50 Vassil Kanev: Hurwitz modular varieties parametrizing coverings with fixed monodromy group

10:50 – 10:55 Break

10:55 – 11:20 Ivan Chipchakov: Fields of dimension one, normal over a global or local field

11:20 – 11:50 Tatiana Gateva-Ivanova: Associative algebras and Lie algebras defined by Lyndon words

11:50 – 11:55 Break

11:55 – 12:15 Jörg Koppitz: The generators of the semigroup of all transformations preserving a crown

12:15 – 12:30 Dimitrinka Vladeva (University of Forestry, Sofia): Derivations of skew Ore polynomial semirings

12:30 – 13:00 Break

13:00 – 13:30 Vladimir S. Gerdjikov: Recursion operators and the hierarchies of MKdV equations related to  $D_4^{(1)}$ ,  $D_4^{(2)}$  and  $D_4^{(3)}$  Kac-Moody algebras

13:30 – 13:50 Elitza Hristova: Regularity of algebras of  $O(n)$ -invariants using Hilbert series

13:50 – 13:55 Break

13:55 – 14:25 Veselin Filev: Holographic Berkooz-Douglas Matrix Model at Finite Temperature

14:25 – 14:45 Hristo Iliev: Families of curves on ruled surfaces and applications to the Hilbert scheme of curves

14:45 – 14:50 Break

14:50 – 15:05 Vilislav Buchackchiev: Forecasting of the Bulgarian House price index using some macroeconomic indicators

15:05 – 15:35 Dimiter Dobrev: Language for Description of Worlds

15:35 – 16:00 Break

16:00 – 16:30 Valentin Iliev: The Uncertainty Principle for Screening Tests

16:30 – 16:50 Tatyana Ivanova: Contact join-semilattices

16:50 – 16:55 Break

16:55 – 17:15 Roussanka Loukanova: Type-Theory of Parametric Algorithms

17:15 – 17:45 Valentin Goranko: Rational coordination in Pure Win-Lose Coordination Games

17:45 – 18:00 Dimitar Guelev: Strategy Profiles and a Vocabulary for Solving Infinite Concurrent Games with Temporary Coalitions in QCTL\*