
LOGIC COLLOQUIUM 2021
July 19–24, 2021, Poznań, Poland
<https://lc2021.pl/>

Program Committee: Boris Zilber (chair), Wojciech Buszkowski, Anuj Dawar, Giuseppe Primiero, Mariya Soskova, Henry Towsner, Matteo Viale.

Organizing Committee: Mariusz Urbański (co-chair), Roman Murawski (co-chair), Wojciech Buszkowski, Joanna Golińska-Pilarek, Leszek Kołodziejczyk, Paweł Łupkowski, Marek Nasieniewski, Jerzy Pogonowski, Tomasz Skura, Kazimierz Świrydowicz, Andrzej Wiśniewski.

Local Organizing Committee: Mariusz Urbański (chair), Paweł Łupkowski, Andrzej Gajda, Szymon Chlebowski, Natalia Żyluk, Patrycja Kupś, Dawid Ratajczyk, Agata Tomczyk, Marta Gawek, Aleksandra Wasielewska.

All events will be held *via* ClickMeeting. Links will be sent to all registered participants. To each session a Technical Assistant will be assigned.

Keynotes: 60 mins

Invited talks: 40 mins

Contributed talks: 20 mins

Session key:

CMP Computability

CSL Logic in Cognitive Science and Linguistics

STH Set Theory

MTH Model Theory

MEP Modal and Epistemic Logic

PPR Proofs and Programs

GEN General

For any inquiry please contact Andrzej Gajda (andrzej.gajda@amu.edu.pl)

MONDAY / JULY 19, 2021

- 08.30-09.00 Opening (Katarzyna Dziubalska-Kołaczyk, AMU Vice-Rector for Research; Andrew Arana, Head of the ASL Committee on Logic in Europe; Krzysztof Dyczkowski, dean of the AMU Faculty of Mathematics and Computer Science; Mariusz Urbański, dean of the AMU Faculty of Psychology and Cognitive Science; Boris Zilber, chair of the LC2021 Program Committee)
- 09.00-10.00 Keynote: **Noam Greenberg**, **The information common to relatively random sequences** (chair: Boris Zilber, TA: Natalia Żyluk)
- 10.15-11.15 Keynote: **Vera Fischer**, **Combinatorial sets of reals** (chair: Boris Zilber, TA: Natalia Żyluk)
- 11.30-12.30 sessions: 1CMP1, 1STH1, 1MTH1
- 14.00-15.00 sessions: 2CMP2, 2CSL1, 2STH2, 2MTH2
- 15.15-16.15 sessions: 3CMP3, 3CSL2, 3STH3, 3MTH3
- 16.30-17.30 Tutorial 1.1: **Krzysztof Krupiński**, **Topological dynamics in model theory** (TA: Patrycja Kupś)
- 17.30-18.30 Discussion rooms

TUESDAY / JULY 20, 2021

- 09.00-10.00 Tutorial 2.1: **Andrew Marks**, **Characterizing Borel complexity and an application to decomposability** (TA: Andrzej Gajda)
- 10.15-11.15 sessions: 4CMP4, 4CSL3, 4STH4
- 11.30-12.30 sessions: 5CMP5, 5CSL4, 5STH5, 5MEP2
- 14.00-15.00 sessions: 6CMP6, 6CSL5, 6STH6, 6MEP3
- 15.15-16.15 Keynote: **Johan van Benthem**, **Interleaving Logic and Counting, A View from the Bottom** (chair: Andrzej Wiśniewski, TA: Andrzej Gajda)
- 16.30-17.30 Tutorial 1.2: **Krzysztof Krupiński**, **Topological dynamics in model theory** (TA: Patrycja Kupś)
- 17.30-18.30 Discussion rooms

WEDNESDAY / JULY 21, 2021

- 09.00-10.00 Tutorial 2.2: **Andrew Marks**, **Characterizing Borel complexity and an application to decomposability** (TA: Andrzej Gajda)
- 10.15-11.15 Keynote: **Benoit Monin**, **The computational content of Milliken's tree theorem** (chair: Anuj Dawar, TA: Andrzej Gajda)
- 11.30-12.30 sessions: 7CMP7, 7CSL6, 7STH7, 7MEP4
- 14.00-15.00 Gödel lecture: **Elisabeth Bouscaren** (chair: Andrew Arana, TA: Andrzej Gajda)
- 15.15-16.15 sessions: 8CMP8, 8STH8, 8MEP5, 8PPR1
- 16.30-17.30 Tutorial 1.3: **Krzysztof Krupiński**, **Topological dynamics in model theory** (TA: Patrycja Kupś)
- 17.30-18.30 Discussion rooms

THURSDAY / JULY 22, 2021

- 09.00-10.00 Tutorial 2.3: **Andrew Marks**, **Characterizing Borel complexity and an application to decomposability** (TA: Andrzej Gajda)
- 10.15-11.15 sessions: 9CMP9, 9MEP6, 9PPR2
- 11.30-12.30 sessions: 10CMP10, 10MEP7, 10PPR3
- 14.00-15.00 sessions: 11MEP8, 11PPR4
- 15.15-16.15 Keynote: **Luca Motto Ros**, **Generalized descriptive set theory for all cofinalities, and some applications** (chair: Joan Bagaria, TA: Natalia Żyluk)
- 16.30-17.30 Keynote: **Ryan Williams**, **Complexity Lower Bounds from Algorithm Design** (chair: Mariusz Urbański, TA: Natalia Żyluk)
- 17.30-18.30 Discussion rooms

FRIDAY / JULY 23, 2021

09.00-10.00 sessions: 12PPR5, 12MTH4
10.15-11.15 sessions: 13PPR6, 13MTH5, 13GEN1
11.30-12.30 sessions: 14PPR7, 14MTH6, 14GEN2
14.00-15.00 sessions: 15PPR8, 15GEN3, 4MEP1
15.15-16.15 Keynote: **Frank Pfenning, Adjoint Logic** (chair: Henry Towsner, TA: Natalia Żyluk)
16.30-17.30 Keynote: **Linda Westrick, Reverse mathematics of Borel sets** (chair: Mariya Soskova, TA: Natalia Żyluk)
17.30-18.30 Discussion rooms

SATURDAY, JULY 24, 2021

09.00-10.00 Keynote: **Artem Chernikov, Measures in model theory** (chair: Matteo Viale, TA: Patrycja Kupś)
10.15-11.15 sessions: 16PPR9, 16MTH7, 16GEN4
11.30-12.30 sessions: 17PPR10, 17MTH8, 17GEN5
14.00-15.00 sessions: 18PPR11, 18MTH9, 18GEN6
15.15-16.15 sessions: 19PPR12, 19MTH10, 19GEN7
16.30-17.30 Keynote: **Elaine Pimentel, A pure view of ecumenical modalities** (chair: Wojciech Buszkowski, TA: Patrycja Kupś)
17.30-18.30 Let's close LC2021 and let's hear about LC2022

SESSIONS

CMP: Computability

(Invited speakers sessions organized by Steffen Lempp and Matthew Harrison-Trainer)

- 1CMP1 (chair: Matthew Harrison-Trainer, TA: Dawid Ratajczyk)
(19.07.21) - Leszek Kołodziejczyk, *Weak König's Lemma in the absence of Σ_1^0 induction.* (11.30-12.10)
- 2CMP2 (chair: Roman Murawski, TA: Dawid Ratajczyk)
(19.07.21) - Sergei Ospichev, *About families in Ershov hierarchy without Friedberg numberings.* (14.00-14.20)
- Donald Stull, *Algorithmic Randomness and Fractal Geometry.* (14.20-14.40)
- Marta Fiori Carones, *Measuring the strength of Ramsey-theoretic statements over RCA_0^* .* (14.40-15.00)
- 3CMP3 (chair: Steffen Lempp, TA: Dawid Ratajczyk)
(19.07.21) - Manlio Valenti, *Algebraic properties of the first-order part of a problem.* (15.15-15.35)
- Arman Darbinyan, *Computable groups and computable group orderings.* (15.35-16.15)
- 4CMP4 (chair: Matthew Harrison-Trainer, TA: Dawid Ratajczyk)
(20.07.21) - Nikolay Bazhenov, *Primitive recursive algebraic structures, and the theory of numberings.* (10.15-10.55)
- 5CMP5 (chair: Aleksander Iwanow, TA: Dawid Ratajczyk)
(20.07.21) - Nikolay Bazhenov, Dariusz Kalociński and Michał Wrocławski, *Degree spectra of unary recursive functions on naturals with standard ordering.* (11.30-11.50)
- Laurent Bienvenu, Valentino Delle Rose and Tomasz Steifer, *Computable randomness relative to almost all oracles.* (11.50-12.10)
- Vittorio Cipriani, *Cantor-Bendixson theorem in the Weihrauch lattice.* (12.10-12.30)
- 6CMP6 (chair: Anton Setzer, TA: Dawid Ratajczyk)
(20.07.21) - Katarzyna W. Kowalik, *Classifying Ramsey-theoretic principles with strongly infinite witnesses over RCA_0^* .* (14.00-14.20)
- Agnieszka Kozdęba and Apoloniusz Tyszka, *The physical limits of computation inspire an open problem that concerns decidable sets $X \subseteq \mathbb{N}$ and cannot be formalized in ZFC as it refers to the current knowledge on X .* (14.20-14.40)
- 7CMP7 (chair: Laurent Bienvenu, TA: Dawid Ratajczyk)
(21.07.21) - Andrés Cordón-Franco, F. Félix Lara-Martín and Manuel J.S. Loureiro, *On determinacy of Lipschitz and Wadge games in second order arithmetic.* (11.30-11.50)
- Karol Duda and Aleksander Iwanow, *A finitely presented group with undecidable amenability.* (11.50-12.10)
- Margarita Gaskova, *Boolean algebras autostable relative to n-constructivizations.* (12.10-12.30)
- 8CMP8 (chair: Steffen Lempp, TA: Dawid Ratajczyk)
(21.07.21) - Jun Le Goh, *Redundancy of information: Lowering effective dimension.* (15.15-15.55)
- Paul Shafer, *An infinite Π_1 set with no Δ_2 cohesive subset.* (15.55-16.15)
- 9CMP9 (chair: Roman Murawski, TA: Dawid Ratajczyk)
(22.07.21) - Josiah Jacobsen-Grocott, *A Characterization of the Strongly η -Representable Many-One Degrees.* (10.15-10.35)
- Paweł Płaczek, *The PTIME complexity of multiplicative nonassociative bilinear logic.* (10.35-10.55)
- Sam Sanders, *The Big Six and Big Seven of Reverse Mathematics, and a new zoo.* (10.55-11.15)
- 10CMP10 (chair: Roman Murawski, TA: Dawid Ratajczyk)
(22.07.21) - Maxim Zubkov and Andrey Frolov, *Spectral universality of linear orders with one binary relation.* (11.30-11.50)
- Yana Michailovskaya, *Computable linear orders enriched by the relations S_L^n .* (11.50-12.10)
- Anton Setzer, *A model of computation for single threaded sequential interactive programs.* (12.10-12.30)

CSL: Logic in Cognitive Science and Linguistics
(Invited speakers sessions organized by Andrzej Wiśniewski)

- 2CSL1** (19.07.21) (chair: Andrzej Wiśniewski, TA: Aleksandra Wasielewska)
- Jonathan Ginzburg, *Quantifiers as (quasi)-Referential Pluralities*. (14.00-14.40)
- 3CSL2** (19.07.21) (chair: Andrzej Gajda, TA: Aleksandra Wasielewska)
- Urszula Wybraniec-Skardowska, A formal-logic approach to the ontology of language. (15.15-15.35)
- Paweł Łupkowski, Erotetic search scenarios and blackboard architecture in group question decomposition. (15.35-15.55)
- Jakub Dakowski, Aleksandra Draszewska, Barbara Adamska, Dominika Juszczyk, Łukasz Abramowicz and Robert Szymański, Addressing logic students' proof making difficulties with Plugin Oriented Programming and gamification. (15.55-16.15)
- 4CSL3** (20.07.21) (chair: Andrzej Wiśniewski, TA: Aleksandra Wasielewska)
- Piotr Łukowski, *A Proposal for Formalization of Kahneman and Tversky's Thinking Fast and Slow*. (10.15-10.55)
- 5CSL4** (20.07.21) (chair: Andrzej Wiśniewski, TA: Aleksandra Wasielewska)
- Mariusz Urbański, *Descriptions are not enough and norms are not forever. Formal modelling of human reasoning processes: triggers, methods and results*. (11.30-12.10)
- 6CSL5** (20.07.21) (chair: Paweł Łupkowski, TA: Aleksandra Wasielewska)
- Francisco Salto and Carmen Requena, BRAIN ACTIVITY MARKS OF LOGICAL VALIDITY: results from EEG and MEG studies. (14.00-14.20)
- Andrzej Gajda, Abductive reasoning in a neural-symbolic system. (14.20-14.40)
- Alba Massolo and Inés Crespo, Arguments against a Bayesian approach to the normativity of argumentation. (14.40-15.00)
- 7CSL6** (21.07.21) (chair: Wojciech Buszkowski, TA: Aleksandra Wasielewska)
- Michael Kaminski, *Extending the Lambek calculus with classical negation*. (11.30-12.10)
- Lachlan McPheat, Mehrnoosh Sadrzadeh, Hadi Wazni and Gijs Wijnholds, Vectorial discourse analysis in Lambek calculus with a bounded relevant modality. (12.10-12.30)

STH: Set Theory

(Invited speakers sessions organized by Joan Bagaria and Christina Brech)

- 1STH1** (chair: Joan Bagaria, TA: Agata Tomczyk)
(19.07.21) - Omer Ben-Neria and Dominik Adolf, *Tree-like scales and free subsets of set theoretic algebras*. (11.30-12.10)
- 2STH2** (chair: Matteo de Ceglie, TA: Agata Tomczyk)
(19.07.21) - Luke Gardiner, *Countable Exponent Partition Relations on the Real Line*. (14.00-14.20)
- Paul Blain Levy, *Broad Infinity and Generation Principles*. (14.20-14.40)
- Gabriel Ciobanu, *Various notions of infinity for finitely supported structures*. (14.40-15.00)
- 3STH3** (chair: Luke Gardiner, TA: Agata Tomczyk)
(19.07.21) - Matteo de Ceglie, *The V-logic Multiverse and MAXIMIZE*. (15.15-15.35)
- Sourav Tarafder and Giorgio Venturi, *ZF between classicality and non-classicality*. (15.35-15.55)
- Martina Iannella, *The complexity of convex bi-embeddability among countable linear orders*. (15.55-16.15)
- 4STH4** (chair: Joan Bagaria, TA: Agata Tomczyk)
(20.07.21) - Sandra Müller, *The strength of determinacy when all sets are universally Baire*. (10.15-10.55)
- 5STH5** (chair: Sandra Müller, TA: Agata Tomczyk)
(20.07.21) - Vladimir Kanovei, *On the ‘Definability of definable’ problem of Alfred Tarski*. (11.30-11.50)
- Philipp Moritz Lücke, *Huge reflection*. (11.50-12.10)
- Christopher Turner, *Forcing axioms and name principles*. (12.10-12.30)
- 6STH6** (chair: Christina Brech, TA: Agata Tomczyk)
(20.07.21) - Giorgio Venturi, *On non-classical models of ZFC*. 14.00-14.40
- 7STH7** (chair: Giorgio Venturi, TA: Agata Tomczyk)
(21.07.21) - Borisa Kuzeljevic and Stevo Todorcevic, *Cofinal types on ω_2* . (11.30-11.50)
- Santiago Jockwich Martinez, *Algebra-valued models and Priests Logic of Paradox*. (11.50-12.10)
- 8STH8** (chair: Christina Brech, TA: Agata Tomczyk)
(21.07.21) - Trevor Wilson, *Characterizing strong cardinals, virtually strong cardinals, and other large cardinals by Löwenheim–Skolem properties*. (15.15-15.55)

MEP Modal and Epistemic Logic

(Invited speakers sessions organized by Nina Gierasimczuk)

- 5MEP2 (20.07.21) (chair: Marek Nasieniewski, TA: Marta Gawek)
- Gemma Robles, Alternative semantical interpretations of the paraconsistent and paracomplete 4-valued logic PL4. (11.50-12.10)
- Yana Rumenova and Tinko Tinchev, Undecidability of modal definability: the class of frames with two commuting equivalence relations. (12.10-12.30)
- 6MEP3 (20.07.21) (chair: Nina Gierasimczuk, TA: Marta Gawek)
- Thomas Bolander, *From Dynamic Epistemic Logic to Socially Intelligent Robots*. (14.00-14.40)
- 7MEP4 (21.07.21) (chair: Marek Nasieniewski, TA: Marta Gawek)
- Gaia Belardinelli and Rasmus K. Rendsvig, Epistemic Planning with Attention as a Bounded Resource. (11.30-11.50)
- Meghdad Ghari, A temporal logic of justification and obligation. (11.50-12.10)
- Taneli Huuskonen, Cromulence logic: duty meets preference. (12.10-12.30)
- 8MEP5 (21.07.21) (chair: Nina Gierasimczuk, TA: Marta Gawek)
- Helle Hvid Hansen, *Automata Minimisation in Logical Form*. (15.15-15.55)
- Dylan Bellier, Massimo Benerecetti, Dario Della Monica and Fabio Mogavero, Good-for-Game QPTL: An Alternating Hodges Semantics. (15.55-16.15)
- 9MEP6 (22.07.21) (chair: Willem Conradie, TA: Marta Gawek)
- Eric Raidl, Definable conditionals. (10.15-10.35)
- Yuya Okawa, Sohei Iwata and Taishi Kurahashi, Craig's interpolation and the fixed point properties for sublogics of interpretability logic IL. (10.35-10.55)
- 10MEP7 (22.07.21) (chair: Marek Nasieniewski, TA: Marta Gawek)
- Eric Raidl, Andrea Iacona and Vincenzo Crupi, The Logic of the Evidential Conditional. (11.30-11.50)
- Willem Conradie and Valentin Goranko, Algorithmic correspondence for relevance logics. (11.50-12.10)
- Davide Emilio Quadrellaro and Gianluca Grilletti, Topological Semantics for Inquisitive and DNA-logics. (12.10-12.30)
- 11MEP8 (22.07.21) (chair: Nina Gierasimczuk, TA: Dawid Ratajczyk)
- Aleksi Anttila, Maria Aloni and Fan Yang, A logic for modelling free choice inference. (14.00-14.20)
- Alexandru Baltag, *The Logic of Cantor's Derivative and the Perfect Core: a topo-logical exploration of unknowable worlds, surprise exams and other epistemic paradoxes*. (14.20-15.00)
- 4MEP1 (23.07.21) (chair: Dorota Leszczyńska-Jasion, TA: Natalia Żyłuk)
- Sophia Knight, *Reasoning about agents' knowledge about one another's strategies in Strategy Logic*. (14.00-14.40)
- Douglas Moore, Naturality as Universal Normative Authority in Stoic Logic. (14.40-15.00)

PPR Proofs and Programs

(Invited speakers sessions organized by Monika Seisenberger)

- 8PPR1 (chair: Monika Seisenberger, TA: Szymon Chlebowski)
(21.07.21) - *Helmut Schwichtenberg, Proofs and computation with infinite data.* (15.15-15.55)
- 9PPR2 (chair: Monika Seisenberger, TA: Szymon Chlebowski)
(22.07.21) - *Tom Powell, Some recent work in proof mining.* (10.15-10.55)
- 10PPR3 (chair: Ivo Pezlar, TA: Szymon Chlebowski)
(22.07.21) - *Michał Sochański and Dorota Leszczyńska-Jasion, On the representation of logical formulas as cographs.* (11.50-12.10)
- 11PPR4 (chair: Dorota Leszczyńska-Jasion, TA: Marta Gawek)
(22.07.21) - *Ivo Pezlar, A Note on Paradoxical Propositions from an Inferential Point of View.* (14.00-14.20)
- *Agata Tomczyk, Marta Gawek and Szymon Chlebowski, Natural Deduction Systems for Intuitionistic Logic with Identity.* (14.20-14.40)
- *Amirhossein Akbar Tabatabai, Feasible Visser-Harrop property for intuitionistic modal logics.* (14.40-15.00)
- 12PPR5 (chair: Monika Seisenberger, TA: Szymon Chlebowski)
(23.07.21) - *Valeria de Paiva and Samuel G. Da Silva, Dialectica and Kolmogorov-Veloso problems.* (09.00-09.20)
- *Vincent Rahli, Brouwerian Intuitionistic Realizability Theories.* (09.20-10.00)
- 13PPR6 (chair: Vincent Rahli, TA: Szymon Chlebowski)
(23.07.21) - *Mateusz Łełyk, On Sigma1 uniform reflection over uniform Tarski biconditionals.* (10.15-10.35)
- *Alexej Pynko, Finite Hilbert-style calculi for disjunctive and implicative finitely-valued logics with equality determinant.* (10.35-10.55)
- *Anahit Chubaryan and Arsen Hambarzumyan, On non-monotonous properties of some propositional proof systems.* (10.55-11.15)
- 14PPR7 (chair: Bartosz Wcisło, TA: Marta Gawek)
(23.07.21) - *Horatiu Cheval, General metatheorems in proof mining.* (11.30-11.50)
- *Anahit Chubaryan, Sargis Hovhannisyan and Hayk Gasparyan, Comparison of two propositional proof systems by lines and by sizes.* (11.50-12.10)
- *Michał Sochański, Dorota Leszczyńska-Jasion, Szymon Chlebowski, Agata Tomczyk, Aleksander Kiryk and Marcin Jukiewicz, Synthetic tableaux: using data analysis in the optimization of proof search.* (12.10-12.30)
- 15PPR8 (chair: Bartosz Wcisło, TA: Szymon Chlebowski)
(23.07.21) - *Raheleh Jalali, On hard theorems for substructural logics.* (14.00-14.20)
- *Mattias Granberg Olsson and Graham Leigh, A proof of conservativity of \widehat{ID}_1^i over Heyting arithmetic via truth.* (14.20-14.40)
- *Nicola Bonatti, Two questions concerning quantifiers rules.* (14.40-15.00)
- 16PPR9 (chair: Monika Seisenberger, TA: Szymon Chlebowski)
(24.07.21) - *Dominique Larchey-Wendling, Extraction of recursive algorithms in Coq using the Braga method.* (10.15-10.55)
- 17PPR10 (chair: Dominique Larchey-Wendling, TA: Szymon Chlebowski)
(24.07.21) - *Lew Gordeev and Edward Haeusler, On Proof Theory in Computational Complexity.* (11.30-11.50)
- *Marcin Jukiewicz and Dorota Leszczyńska-Jasion, Improving the work of a genetic algorithm in proof-search tasks.* (11.50-12.10)
- *Luiz Carlos Pereira, Elaine Pimentel and Valeria de Paiva, Ecumenic Negation: one or two?* (12.10-12.30)

18PPR11 (chair: Lew Gordeev, TA: Szymon Chlebowski)
(24.07.21) - Yukihiro Masuoka and Makoto Tatsuta, Counterexample to cut-elimination in cyclic proof system. (14.00-14.20)
- Yaroslav Petrukhin, Cut-free proof systems for non-standard modal logics based on S5. (14.20-14.40)
- Bartosz Wcisło, Disjunctive correctness and sequential induction. (14.40-15.00)

19PPR12 (chair: Lew Gordeev, TA: Szymon Chlebowski)
(24.07.21) - Yong Cheng, The interpretation degree structure of r.e. theories for which the first incompleteness theorem holds. (15.15-15.35)
- Peter Koepke, The Naproche natural language proof assistant. (15.35-15.55)
- Katalin Bimbo, Abaci running backward. (15.55-16.15)

MTH Model Theory

(Invited speakers sessions organized by Ludomir Newelski)

- 1MTH1** (chair: Ludomir Newelski, TA: Aleksandra Wasielewska)
(19.07.21) - Pablo Cubides Kovacsics, *Beautiful pairs and spaces of definable types*. (11.30-12.10)
- 2MTH2** (chair: Pablo Cubides Kovacsics, TA: Szymon Chlebowski)
(19.07.21) - Ivan Di Liberti, *Formal model theory and Higher Topology*. (14.00-14.20)
- Aizhan Altayeva, Beibut Kulpeshov and Sergey Sudoplatov, *On algebras of binary formulas for almost ω -categorical weakly o-minimal theories*. (14.20-14.40)
- Dmitry Emelyanov, Beibut Kulpeshov and Sergey Sudoplatov, *On algebras of binary formulas for partially ordered theories*. (14.40-15.00)
- 3MTH3** (chair: Ludomir Newelski, TA: Szymon Chlebowski)
(19.07.21) - *Yatir Halevi, Definable fields in various dp-minimal fields*. (15.15-15.55)
- 12MTH4** (chair: Ludomir Newelski, TA: Agata Tomczyk)
(23.07.21) - *Daniel Max Hoffmann, Kim-independence and ranks*. (09.00-09.40)
- 13MTH5** (chair: Daniel Max Hoffmann, TA: Agata Tomczyk)
(23.07.21) - John Baldwin, *Finer classification of Strongly minimal sets*. (10.15-10.35)
- Adam Malinowski and Ludomir Newelski, *A few remarks on strongly generic sets*. (10.35-10.55)
- Christian Espindola, *Categoricity theorems in infinite quantifier languages*. (10.55-11.15)
- 14MTH6** (chair: Adam Malinowski, TA: Agata Tomczyk)
(23.07.21) - Alexey Stukachev, Marina Stukacheva and Alexey Ryzhkov, *Approximation spaces over dense linear orders*. (11.30-11.50)
- Gergely Székely, *Conceptual Distance and Algebras of Concepts*. (11.50-12.10)
- Francesco Gallinaro, *Around exponential algebraic closedness*. (12.10-12.30)
- 16MTH7** (chair: Alexey Stukachev, TA: Agata Tomczyk)
(24.07.21) - Davit Harutyunyan, *On Some Associative Formula with Functional Variables*. (10.15-10.35)
- Viktor Verbovskiy and Aigerim Dauletiyarova, *On local monotonicity of unary functions definable in o-stable ordered groups*. (10.35-10.55)
- Ruaan Kellerman and Valentin Goranko, *Approximating trees as coloured linear orders and complete axiomatisations of some classes of trees*. (10.55-11.15)
- 17MTH8** (chair: Ruaan Kellerman, TA: Agata Tomczyk)
(24.07.21) - Nurlan Markhabatov and Sergey Sudoplatov, *On closures for partially ordered families of theories*. (11.30-11.50)
- Beibut Kulpeshov, *On criterion for binarity of almost ω -categorical weakly o-minimal theories*. ((11.50-12.10))
- Inessa Pavlyuk and Sergey Sudoplatov, *On rich properties for the family of theories of Abelian groups*. (12.10-12.30)
- 18MTH9** (chair: Ruaan Kellerman, TA: Marta Gawek)
(24.07.21) - Pedro H. Zambrano and David Reyes, *Co-quantale valued logics*. (14.00-14.20)
- Luca Reggio, *Game comonads and homomorphism counting in finite model theory*. (14.20-14.40)
- Claudio Agostini and Eugenio Colla, *An algebraic characterization of Ramsey Monoids*. (14.40-15.00)
- 19MTH10** (chair: Pedro H. Zambrano, TA: Marta Gawek)
(24.07.21) - Aibat Yeshkeyev, Aigul Issayeva and Nazgul Shamatayeva, *On atomic and algebraically prime definable subsets of semantic model*. (15.15-15.35)
- Aibat Yeshkeyev, Olga Ulbrikht and Nazerke Mussina, *On the categoricity of the class of the Jonsson spectrum*. (15.35-15.55)
- Aibat Yeshkeyev and Olga Ulbrikht, *The Jonsson nonforking notion under some positiveness*. (15.55-16.15)

GEN General

- 13GEN1 (23.07.21) (chair: Roman Murawski, TA: Dawid Ratajczyk)
- Pavel Arazim, Logic not being serious. (10.15-10.35)
- Bruno Bentzen, How do we intuit mathematical constructions? (10.35-10.55)
- Ludovica Conti, Logicality and Abstraction. (10.55-11.15)
- 14GEN2 (23.07.21) (chair: Pavel Arazim, TA: Dawid Ratajczyk)
- Michał Tomasz Godziszewski and Luca San Mauro, Quotient structures, philosophy of computability theory and computational structuralism. (11.30-11.50)
- Iosif Petrakis, Chu representations of categories related to constructive mathematics. (11.50-12.10)
- Raffael Stenzel, $(\infty, 1)$ -Categorical Comprehension Schemes. (12.10-12.30)
- 15GEN3 (23.07.21) (chair: Michał Tomasz Godziszewski, TA: Marta Gawek)
- Nick Bezhanishvili and Fan Yang, Intermediate logics in the team semantics setting. (14.00-14.20)
- José M. Méndez, Gemma Robles and Francisco Salto, Three-valued relevance logics. (14.20-14.40)
- 16GEN4 (24.07.21) (chair: Paula Quinon, TA: Aleksandra Wasielewska)
- Sara L. Uckelman, Women in the history of logic: why does it matter who our foremothers are? (10.15-10.35)
- Michał Tomasz Godziszewski, Fairness and Justified Representation in Judgment Aggregation and Belief Merging. (10.35-10.55)
- Michał Walicki, Logic of sentential predicates. (10.55-11.15)
- 17GEN5 (24.07.21) (chair: Sara L. Uckelman, TA: Aleksandra Wasielewska)
- Jannik Vierling, The limits of the n-clause calculus. (11.30-11.50)
- Mohamed Khaled, Algebras of Concepts and Their Networks: Boolean Algebras. (11.50-12.10)
- Judit Madarász, Concept algebra of special relativistic spacetime. (12.10-12.30)
- 18GEN6 (24.07.21) (chair: Leszek Kołodziejczyk, TA: Aleksandra Wasielewska)
- Azza Gaysin, H-Coloring Dichotomy in Proof Complexity. (14.00-14.20)
- William Stafford, Completeness of intuitionistic logic for generalised proof-theoretic semantics. (14.20-14.40)
- Alberto Termine, Fabio Aurelio D'Asaro and Giuseppe Primiero, Modelling depth-bounded Boolean reasoning with Markov decision processes and reinforcement learning. (14.40-15.00)
- 19GEN7 (24.07.21) (chair: Leszek Kołodziejczyk, TA: Aleksandra Wasielewska)
- Lorenzo Rossi and Michał Tomasz Godziszewski, First-order vs. Second-order theories: searching for deep disagreement. (15.15-15.35)
- Paula Quinon, The anti-mechanist argument based on Gödel's Incompleteness Theorems, indescribability of the concept of natural number and deviant encodings. (15.35-15.55)