

**ASSOCIATION FOR SYMBOLIC LOGIC**  
**2019 NORTH AMERICAN ANNUAL MEETING**

City University of New York Graduate Center  
New York, New York

May 20-23, 2019

---

Program Committee: Sam Buss, Johanna Franklin, Wesley Holliday (chair), Elaine Landry, Andrew Marks, and Joel Nagloo.

Local Organizing Committee: Evangelia Antonakos (co-chair), Sergei Artemov, Alfred Dolich, Shoshana Friedman (co-chair), Gunter Fuchs, and Joel Hamkins.

Please see <https://asl2019.common.gc.cuny.edu> for additional information.

---

All plenary and tutorial lectures will be held in Proshansky Auditorium, on the lower level of the Graduate Center. All special session and contributed talks will be in the nearby rooms C197, C198, and C201–C205. The welcoming reception will be held at 6:00 pm on Monday, May 20 in the Concourse Lobby, in front of Proshansky Auditorium.

---

MONDAY, May 20

Morning

- 9:00 – 9:40 Registration and coffee.
- 9:40 – 9:50 Opening Remarks
- 9:50 – 10:50 Invited Lecture: **Rosalie Iemhoff** (Utrecht University), *The proof systems of a logic*.
- 11:00 – 12:30 Special Sessions D1 and E1. See pages 3–5.
- 11:15 – 11:55 Special Session A1. See pages 3–5.

Afternoon

- 2:00 – 3:30 Special Sessions A2, B1, C1, D2, and E2. See pages 3–5.
- 3:40 – 4:40 Invited Lecture: **Dana Bartosova** (University of Florida), *Dynamics of topological groups via structures*.
- 4:50 – 5:50 Tutorial: **Jack Lutz** (Iowa State University), *Finite-state information and randomness, Part A*.
- 5:50 – 6:00 Group Photo: Proshansky Auditorium.
- 6:00 – 8:00 Welcoming Reception: Concourse Lobby in front of Proshansky Auditorium.

## TUESDAY, May 21

### Morning

- 9:00 – 9:30 Coffee.  
9:30 – 11:00 Special Sessions A3, B2, C2, D3 and E3. See pages 3–5.  
11:10 – 12:10 Tutorial: **Jack Lutz** (Iowa State University), *Finite-state information and randomness, Part B*.

### Afternoon

- 2:00 – 3:00 Invited Lecture: **Deirdre Haskell** (McMaster University), *Different approaches to the study of analytic functions on an ordered valued field*.  
3:15 – 4:15 Invited Lecture: **Jean-Pierre Marquis** (Université de Montréal), *Designing foundations for abstract structuralism: from Bourbaki to FOLDS*.  
4:25 – 6:00 Contributed Talks. See pages 6–7.

## WEDNESDAY, May 22

### Morning

- 9:00 – 9:30 Coffee.  
9:30 – 10:30 Gödel Lecture: **Sam Buss** (University of California, San Diego), *Totality, provability and feasibility*.  
10:40 – 12:10 Special Sessions A4, C3, E4, and F1. See pages 3–5.

### Afternoon

- 2:00 – 3:00 Invited Lecture: **Rehana Patel** (Harvard University), *Combining logic and probability in the presence of symmetry*.  
3:15 – 4:15 Invited Lecture: **Vera Fischer** (University of Vienna), *Almost disjoint and independent families*.  
4:25 – 6:00 Contributed Talks. See pages 6–7.

## THURSDAY, May 23

### Morning

- 9:00 – 9:30 Coffee.  
9:30 – 10:30 Invited Lecture: **Lance Fortnow** (Georgia Institute of Technology), *The P v NP problem in the era of big data and fast computing*.  
11:00 – 12:00 Invited Lecture: **Mariya Soskova** (University of Wisconsin–Madison), *The enumeration degrees: the known and the unknown*.  
12:10 – 12:50 Special Session F2. See pages 3–5.

## SPECIAL SESSIONS

### A. Computability Theory

(Organized by Doug Cenzer and Linda Brown Westrick)

Session A1: Monday, May 20 in room C197.

11:15 – 11:55 **Joseph Miller** (University of Wisconsin–Madison), *A structural dichotomy in the enumeration degrees.*

Session A2: Monday, May 20 in room C197.

2:00 – 2:40 **Meng Che “Turbo” Ho** (Purdue University), *The homomorphism spectra of torsion-free abelian groups.*

2:45 – 3:25 **Russell Miller** (CUNY), *Computable structure theory and forcing.*

Session A3: Tuesday, May 21 in room C197.

9:30 – 10:10 **Bjørn Kjos-Hanssen** (University of Hawaii), *Constructing a weak subset of a random set.*

10:15 – 10:55 **Jun Le Goh** (Cornell University), *A theorem of Halin and hyperarithmetic analysis.*

Session A4: Wednesday, May 22 in room C197.

10:40 – 11:20 **Karen Lange** (Wellesley College), *Agreement reducibility.*

11:25 – 12:05 **Ludovic Patey** (CNRS, Institut Camille Jordan, University of Lyon), *Ramsey-like theorems and moduli of computation.*

### B. Logic and Philosophy

(Organized by Rohan French)

Session B1: Monday, May 20 in room C201.

2:00 – 2:40 **Toby Meadows** (University of California, Irvine), *Iterability and generalised proof theory.*

2:45 – 3:25 **Andrew Tedder\* and Igor Sedlár** (Czech Academy of Sciences), *Conjugates in relational semantics for positive substructural logics.*

Session B2: Tuesday, May 21 in room C201.

9:30 – 10:10 **Shawn Standefer** (The University of Melbourne), *On the quasi-proof method.*

10:15 – 10:55 **Katalin Bimbó** (University of Alberta), *Evolution of decidability proofs based on sequent calculuses.*

## C. Model Theory

(Organized by Rahim Moosa and Caroline Terry)

Session C1: Monday, May 20 in room C203.

2:00 – 2:40 **James Freitag** (University of Illinois at Chicago), *Differential algebraic groups of small typical dimension.*

2:45 – 3:25 **Gleb Pogudin** (New York University), *Elimination and consistency checking for difference and difference-differential equations.*

Session C2: Tuesday, May 21 in room C203.

9:30 – 10:10 **Alex Kruckman** (Indiana University), *Interpolative fusions.*

10:15 – 10:55 **Léo Jiminez** (Notre Dame University), *Groupoids and some strengthenings of internality.*

Session C3: Wednesday, May 22 in room C203.

10:40 – 11:20 **Erin Caulfield** (McMaster University), *Classifying expansions of the real field by complex subgroups.*

11:25 – 12:05 **Rizos Sklinos** (Stevens Institute of Technology), *Elementary theories of hyperbolic groups.*

## D. Proof Theory: Justification Logic

(Organized by Roman Kuznets)

Session D1: Monday, May 20 in room C202.

11:00 – 11:40 **Sergei Artemov** (CUNY Graduate Center), *Logic of Proofs and the provability of consistency.*

11:45 – 12:25 **Junhua Yu** (Tsinghua University), *Self-referentiality in the framework of justification logic.*

Session D2: Monday, May 20 in room C202.

2:00 – 2:40 **Sonia Marin** (IT-University), *Justification logic for modal logics on an intuitionistic base.*

2:45 – 3:25 **Grigory K. Olkhovikov** (Ruhr University Bochum), *Seeing to it that a proof is announced: a survey of justification stit logic.*

Session D3: Tuesday, May 21 in room C202.

9:30 – 10:10 **Melvin Fitting** (CUNY Graduate Center), *Justification logics.*

10:15 – 10:55 **Thomas Studer** (University of Bern), *Subset semantics for justification logic.*

## E. Set Theory

(Organized by Simon Thomas)

Session E1: Monday, May 20 in room C198.

11:00 – 11:40 **Kaethe Minden** (Marlboro College), *The subcompleteness of diagonal Prikry forcing.*

11:45 – 12:25 **Daniel Hathaway** (University of Vermont), *Generic coding with help.*

Session E2: Monday, May 20 in room C198.

2:00 – 2:40 **Zach Norwood** (Cornell University), *The Ramsey property and coideals.*

2:45 – 3:25 **Iian Smythe** (Rutgers University), *Equivalence of generic reals.*

Session E3: Tuesday, May 21 in room C198.

9:30 – 10:10 **Aristotelis Panagiotopoulos** (California Institute of Technology), *Higher dimensional obstructions for star reductions.*

10:15 – 10:55 **Joseph Zielinski** (Carnegie Mellon University), *Orbit equivalence relations of actions of non-locally compact Polish groups.*

Session E4: Wednesday, May 22 in room C198.

10:40 – 11:20 **Garrett Ervin** (Carnegie Mellon University), *Self-similar structures.*

11:25 – 12:05 **Victoria Gitman** (CUNY Graduate Center), *Set theories with classes.*

## F. Proof Complexity

(Gödel Lecture Special Session, organized by Robert Robere)

Session F1: Wednesday, May 22 in room C201.

10:40 – 11:20 **Robert Robere** (Rutgers University), *Circuits, proofs, and communication.*

11:25 – 12:05 **Susanna F. de Rezende** (KTH Royal Institute of Technology), *Time-space trade-offs in proof complexity.*

Session F2: Thursday, May 23 in room C201.

12:10 – 12:50 **Aaron Potechin** (University of Chicago), *Sum of squares proofs on boolean variables.*

## CONTRIBUTED TALKS

TUESDAY, May 21

Session I Tuesday, May 21 in room C197.

- 4:25 – 4:45 **Brent Cody\***, **Victoria Gitman**, and **Chris Lambie-Hanson**, *A  $\square(\kappa)$ -like principle consistent with weak compactness.*
- 4:50 – 5:10 **Natasha Dobrinen**, *Borel colorings of a space of Rado graphs.*
- 5:15 – 5:35 **Sonia Navarro-Flores**, *Ideals and topological Ramsey spaces.*
- 5:40 – 6:00 **Jonas Reitz** and **Kameryn Williams\***, *Inner mantles and iterated HOD.*

Session II Tuesday, May 21 in room C198.

- 4:25 – 4:45 **Samuel Braunfeld\*** and **Chris Laskowski**, *Coding graphs in expansions of stable theories.*
- 4:50 – 5:10 **Vincent Guingona**, *Ranks in theories without the independence property.*
- 5:15 – 5:35 **Elliot Kaplan**, *Generic derivations on o-minimal structures.*

Session III Tuesday, May 21 in room C201.

- 4:25 – 4:45 **Francine F. Abeles**, *Mechanical proof methods in the work of Charles L. Dodgson nad Christine Ladd-Franklin.*
- 4:50 – 5:10 **J.C. Beall** and **Caleb Camrud\***, *A note on FDE ‘all the way up’.*
- 5:15 – 5:35 **Yifeng Ding**, *On the modal logic of belief with propositional quantifiers.*

Session IV Tuesday, May 21 in room C203.

- 4:25 – 4:45 **Nathanel L. Ackerman**, **Cameron E. Freer**, and **Robert S. Lubarsky\***, *Feedback computability on Cantor space.*
- 4:50 – 5:10 **Michał Tomasz Godziszewski\***, **Dino Rossegger**, and **Luca San Mauro**, *Computably enumerable quotient presentations of structures.*
- 5:15 – 5:35 **Cameron E. Freer**, *On the computability of graphons.*
- 5:40 – 6:00 **Iván Ongay Valverde**, *Application of entangled sets to the Turing degrees automorphism problem.*

WEDNESDAY, May 22

Session V Wednesday, May 22 in room C197.

- 4:25 – 4:45 **Chris Conidis**, *On  $\Pi_1^1$ -complete ring-theoretic constructions.*  
4:50 – 5:10 **Stephen Flood, Matthew Jura, Oscar Levin, and Tyler Markkanen\***, *Perfect matchings in graphs and reverse mathematics.*  
5:15 – 5:35 **Sebastiaan A. Terwijn**, *Fixed point theorems and numberings.*

Session VI Wednesday, May 22 in room C198.

- 4:25 – 4:45 **Cezary Cieřliński**, *Satisfaction classes via proof-theoretic methods.*  
4:50 – 5:10 **Michał Tomasz Godziszewski**, *Local disquotation, semantic non-conservativity of truth, and models of set theory.*  
5:15 – 5:35 **Michał Tomasz Godziszewski\*** and **Rafał Urbaniak**, *Infinite liar in a finitistic setting.*

Session VII Wednesday, May 22 in room C201.

- 4:25 – 4:45 **James Walsh**, *Semantic reflection and iterated syntactic reflection.*  
4:50 – 5:10 **Dan E. Willard**, *A new generalization of the Second Incompleteness Theorem.*  
5:15 – 5:35 **Joachim Mueller-Theys**, *The total unprovability of consistency.*

Session VIII Wednesday, May 22 in room C203.

- 4:25 – 4:45 **Hunter Chase\*** and **James Freitag**, *Model-theoretic techniques in query learning.*  
4:50 – 5:10 **Reid Dale**, *Which hypotheses are we testing?*  
5:15 – 5:35 **Marcos Mazari-Armida**, *Limit models and universal torsion-free groups with pure embeddings.*  
5:40 – 6:00 **Ioannis Souldatos**, *Non-absoluteness of model existence and amalgamation.*