Schedule

Monday January 29

09:00–09:55: *Introduction to semialgebraic proof systems* (Edward Hirsch)

09:55–10:15: *Coffee*

10:15–11:10: *Some classic SOS gems with proofs* (Albert Atserias)

11:15–12:10: *Random formulas and interpolation in Cutting Planes* (Pavel Hrubeš)

12:15–13:30: *Lunch*

14:15–15:10: *Bounded arithmetic and propositional upper bounds* (Neil Thapen)

15:15–16:10: *Hard Principles from Bounded Arithmetic* (Arnold Beckmann)

16:10–16:30: *Coffee*

16:30–17:25: *Partially definable forcing.* (Moritz Müller)

17:30–18:00: *Presentation of participants*

18:00–19:15: *Dinner*

Tuesday January 30

09:00–09:55: *Bounded-depth Frege lower bounds* (Urquhart)

09:55–10:15: *Coffee*

10:15–11:10: *Switching lemmas* (Beame)

11:15–12:10: *Bounded-depth Frege with parity gates and subsystems thereof* (Leszek Kołodziejczyk)

12:15–13:30: *Lunch*

15:00–15:25: *On Small-Depth Frege Proofs for Tseitin for Grids* (Johan Håstad)

15:30–15:55: *Clique Is Hard on Average for Regular Resolution* (Ilario Bonacina)

16:00–16:30: *Coffee*

16:30–16:55: *Sum-of-Squares, Counting Logics and Graph Isomorphism* (Joanna Ochremiak)

17:00–17:25: *Sum of squares lower bounds from symmetry and a good story* (Aaron Potechin)

17:30–17:55: *Monotone Circuit Lower Bounds from Resolution* (Dmitry Sokolov)

18:00–19:15: *Dinner*

Wednesday January 31

09:00–09:55: *Algebraic proof systems* (Nordström)

09:55–10:15: *Coffee*

10:15–11:10: *Ideal proof systems* (Grochow)

11:15–12:10: *Automatizability* (Lauria)

12:15–13:30: *Lunch*

18:00–19:15: *Dinner*

19:30–21:00: *Panel discussion*

Thursday February 01

09:00–09:25: *Are Short Proofs Narrow? QBF Resolution is not so Simple* (Meena Mahajan)

09:30–09:55: *What's different in QBF from propositional proof complexity?* (Olaf Beyersdorff)

10:00–10:30: *Coffee*

10:30–10:55: *Parameter-free bounded induction* (Emil Jeřábek)

11:00–11:25: *Provability of weak circuit lower bounds* (Jan Pich)

11:30–11:55: *Bounded arithmetic does not collapse to approximate counting* (Neil Thapen)

12:15–13:30: *Lunch*

15:30–16:00: *Coffee*

16:00–16:25: *Proof Complexity Lower Bounds from Algebraic Circuit Complexity* (Michael Forbes)

16:30–16:55: *Nullstellensatz is Polynomially Equivalent to Sum-of-Squares over Algebraic Circuits* (Iddo Tzameret)

17:00–17:25: (Fleming)

17:30–17:55: *Lifting Nullstellensatz Degree to Monotone Span Program Size* (Robert Robere)

18:00–19:15: *Dinner*

19:30–21:00: *Music evening*

Friday February 02

09:00–09:25: *Games and the resolution of Tseitin formulas* (Jacobo Toran)

09:30–09:55: *Proof Systems for Pseudo-Boolean SAT Solving* (Marc Vinyals)

10:00–10:15: *Coffee*

10:15–11:10: *Hardness condensation* (Nordström)

12:15–13:30: *Lunch*