

Dagstuhl Seminar 24111
Logics for Dependence and Independence:
Expressivity and Complexity
(Mar 10–Mar 15, 2024)

Monday

9.00 Opening Session

10.00 Coffee

10.30-11.30 Jonni Virtema: Team Semantics (tentative title)

11.30-12.00 Phokion G. Kolaitis: Characterizing Data Dependencies

12.00 Lunch

15.00 Coffee and Cake

15.30-16.30 Erika Abraham: Hyperproperties (tentative title)

16.45–17.15 Hadar Frenkel: Second-Order Hyperproperties

17.15-17.45 Martin Zimmermann: Model Checking LTL with Team Semantics

18.00 Dinner

Tuesday

9.00-10.00 Maria Aloni: Logic and Language (tentative title)

10.00 Coffee

10.30-11.00 Søren Brinck Knudstorp: Expressive Power: BSML and Propositional Independence Logic

11.00-12.00 Till Miltzow: Existential Theory of the Reals

12.00 Lunch

15.00 Coffee and Cake

15.30-16.30 Cheuk Ting Li: The Undecidability of Probabilistic Conditional Independence Implication

16.35-17.15 Milan Studený: Lattices of Abstract Conditional Independence Models and their Implication-based Description

17.15-17.45 Batya Kenig: Approximate Implication for Probabilistic Graphical Models

18.00 Dinner

Wednesday

9.00-9.30 Fredrik Engström: The Propositional Logic of Teams

9:30-10.00 Fausto Barbero: Conditionals for Union-closed Languages

10.00 Coffee

10.30-11.00 Aleksi Ilari Anttila: Deep Inference Sequent Calculi for Propositional Logics with Team Semantics

11.00 Open Problem Session

12.00 Lunch

13.15 Open Problem Walk

15.45 Coffee and Cake

18.00 Dinner

Thursday

9.00-9.30 Arne Meier: A Parameterized View on the Complexity of Dependence Logic

9.30-10.00 Yasir Mahmood: Parameterized Complexity of Weighted Team Definability

10.00 Coffee

10.30-11.00 Minna Hirvonen: Implication Problems for Some Qualitative and Quantitative Dependencies

11.00-11.30 Matilda Häggblom: Approximate Dependence Atoms

11.30-12.00 Erich Grädel: Unifying Hidden-variable Problems from Quantum Mechanics by Logics of Dependence and Independence

12.00 Lunch

15.00 Coffee and Cake

15.30-16:00 Dario Della Monica: Hyperteams for compositionality and determinacy in logics for games

16.00-16.30 Jef Wijsen: Consistent Query Answering with Respect to Primary Keys: Past Research and Future Challenges

16.40-17.05 Ana Oliveira da Costa: Hypernode Automata

17.05-17.30 Max Sandström: Asynchronous TeamLTL
17.30-17.55 Jens Gutsfeld: Temporal Team Semantics Revisited

18.00 Dinner

19.30 Music Event

Friday

9.00-9.30 Peter Harremoës: Inclusion Diagrams as Lattices of Convex Geometries
9.30-10.00 Miika Hannula: Conditional Independence on Semiring Relations

10.00 Coffee

10.30-11.00 Marius Tritschler: Guarded Hybrid Team Logics
11.00-11.30 Pietro Galliani: Strongly First Order Dependencies and Dual Negation in Team Semantics
11.30-12.00 Arnaud Durand: Modular SAT-based techniques for reasoning tasks in team semantics

12.00 Closing Session

12.15 Lunch