Wednesday, 6 June

8:30-9:30 **Tutorial 1** Andrea Schalk, Manchester: Introduction to game semantics

9:30-9:50 **Break**

9:50-10:50 **Plenary** Patricia Johann, Strathclyde: Lifting Functors: Induction, Coinduction, and (maybe) Parametricity

10:50-11:00 **Break**

11:00-11:30 Stephen Brookes: Concurrent Separation Logic and Syntactic Control of Interference

11:30-12:00 Aquinas Hobor and Robert Dockins: Time Bounds for General Function Pointers

12:00-13:30 Lunch

**Session on Logic, computation and algebraic topology**

13:30-14:30 **Plenary** Steve Awodey, CMU: Homotopy Type Theory

14:30-15:00 Sanjeevi Krishnan: Optimization and Poincare Duality

15:00-15:20 **Break**

15:20-15:50 Eric Goubault: Geometry of trace spaces and (some) applications

15:50-16:20 Nicola Gambino: Homotopy-initial W-types

16:20-16:50 Andrej Bauer: Automation of proofs in HoTT

16:50-17:00 **Break**

17:00-17:30 Joachim Kock: Data Types with Symmetries and Polynomial Functors Over Groupoids

17:30-18:00 Naohiko Hoshino: A Representation Theorem for Unique Decomposition Categories

19:00 **Reception** at the Roman Baths

Thursday, 7 June

8:30-9:30 **Tutorial 2** Paul-Andre Melliès, Paris VII: Tensorial logic, dialogue categories and games

9:30-9:50 **Break**

9:50-10:50 **Plenary** Michael Clarkson, GWU: Mathematical Foundations for Computer Security

10:50-11:00 **Break**

11:00-11:30 Matteo Cimini, Mohammadreza Mousavi, Michel Reniers and Murdoch Gabbay: Nominal SOS

11:30-12:00 Murdoch Gabbay and Dan Ghica: Game Semantics in the Nominal Model

12:00-13:30 Lunch

**Session on Computational effects**

13:30-14:30 **Plenary** John Power, Bath: Category Theoretic Understandings of Universal Algebra and its dual: monads and Lawvere theories, comonads and ?

14:30-15:00 Alex Simpson: Observational equivalence for computational effects

15:00-15:20 **Break**


15:50-16:20 Andrej Bauer: A semantic account of an effect system

16:20-16:50 Sam Staton: State-passing style

16:50-17:00 **Break**

17:00-17:30 Ingo Battenfeld: Observationally-induced effects in cartesian closed categories

17:30-18:00 Barbara Petit: Continuation Models for the Lambda Calculus with Constructors
Friday, 8 June

8:30-9:30 **Tutorial 3** Martin Hyland, Cambridge: Title TBA

9:30-9:50 **Break**


10:20-10:50 Toby Wilkinson: A Characterisation of Expressivity for Coalgebraic Bisimulation and Simulation

10:50-11:00 **Break**

11:00-11:30 Filippo Bonchi, Marcello Bonsangue, Georgiana Caltais, Jan Rutten and Alexandra Silva: Final Semantics for Decorated Traces

11:30-12:00 Dan Teodosiu: A Truly Concurrent Process Semantics over Multi-Pomsets of Consumable Resources

12:00-13:30 **Lunch**

**Session on Computability on Continuous Data**

13:30-14:30 **Plenary** Drew Moshier: Logic of integration, dimension and related geometry

14:30-15:00 Nick Bezhanishili: Logics for compact Hausdorff spaces

15:00-15:20 **Break**


15:50-16:20 Jens Blanck: Interval domains and computable sequences

16:20-16:50 Martin Escardo: The intrinsic topology of a Martin-Lof universe, with an application to Rice’s theorem for the universe

16:50-17:00 **Break**

17:00-17:30 Andrew Lawrence, Ulrich Berger and Monika Seisenberger: Extracting a DPLL Algorithm

17:30-18:00 Oleksandr Manzyuk: A Simply Typed Lambda-Calculus of Forward Automatic Differentiation

19:00 **Dinner** at the Roman Baths

Saturday, 9 June

8:30-9:30 **Tutorial 4** Luke Ong, Oxford: Two-level Game Semantics, Intersection Types and Higher-Order Model Checking

9:30-9:50 **Break**

9:50-10:20 Dan Ghica and Nikos Tzevelekos: A System-Level Game Semantics


10:50-11:00 **Break**

11:00-11:30 Roy Dyckhoff, Mehrnoosh Sadrzadeh and Julien Truffaut: Algebra, Proof Theory and Applications for a Logic of Propositions, Actions and Adjoint Modal Operators

11:30-12:00 Wolfgang Jeltsch: Towards a Common Categorical Semantics for Linear-Time Temporal Logic and Functional Reactive Programming

12:00-13:30 **Lunch**

13:30-14:30 **Plenary** Dexter Kozen: New

14:30-14:50 **Break**


15:20-15:50 Ulrich Berger and Tie Hou: Typed vs Untyped Realizability

**End of conference**