

| Time (BST)    | Monday 12/07   | Tuesday 13/07   | Wednesday 14/07   | Thursday 15/07  | Friday 16/07   |
|---------------|--|---|---|---|--|
| 9:00 - 9:30   | Tea Break  | Tea Break   | Tea Break   | Tea Break   | Tea Break  |
| 9:30 - 11:00  | Opening  | <i>Konstantinos Meichanetzidis</i> , Robin Lorenz, Anna Pearson, Alexis Toumi, Giovanni de Felice, Dimitri Kartsaklis, Bob Coecke, "QNL <sup>P</sup> : Compositional Models of Meaning on a Quantum Computer" | Emma Chollet, Bryce Clarke, Michael Johnson, Maurine Songa, <i>Vincent Wang</i> , <i>Gioele Zardini</i> , "Limits and colimits in a category of lenses" | <i>Nicolas Behr</i> , Joachim Kock, "Tracelet Hopf algebras and decomposition spaces"   | Xiaodong Jia, Bert Lindenhovius, Michael Mislove, <i>Vladimir Zamdzhiev</i> , "Commutative Monads for Probabilistic Programming Languages"                           |
|               | <i>Nihil Shah</i> , "Restricting Power: The Pebble-Relation Comonad in Finite Model Theory"  | <i>Soichiro Fujii</i> , Yuni Iwamasa, Kei Kimura, "Quantaloidal approach to constraint satisfaction"  | <i>Matthew Di Meglio</i> , "Coequalisers under the lens"  | <i>Antonin Delpauch</i> , Jamie Vicary, "The word problem for braided monoidal categories is unknot-hard"   | <i>Tobias Fritz</i> , Tomáš Gonda, Paolo Perrone, "De Finetti's Theorem in Categorical Probability"  |
|               | <i>John van de Wetering</i> , "A categorical construction of the real unit interval"   | <i>Matt Wilson</i> , Augustin Vanrietvelde, "A categorical framework for the expression of composable constraints: routed categories"   | Fosco Loregian, <i>Fabrizio Genovese</i> , Daniele Palombi, "A Categorical Semantics for Bounded Petri Nets"  | <i>Zoltan A. Kocsis</i> , Benjamin Merlin Bumpus, "Treewidth via Spined Categories"   | <i>Razin A. Shaikh</i> , Lia Yeh, Benjamin Rodatz, Bob Coecke, "Composing Conversational Negation"   |
| 11:00 - 11:30 | Tea Break  | Tea Break   | Tea Break   | Tea Break   | Tea Break  |
| 11:30 - 13:00 | <i>Titouan Carette</i> , Marc de Visme, Simon Perdrix, "Graphical Language with Delayed Trace: Picturing Quantum Computing with Finite Memory" | <i>Andrew Pitts</i> , S. C. Steenkamp, "Constructing Initial Algebras Using Inflationary Iteration"   | Geoff Cruttwell, <i>Bruno Gavranovic</i> , Neil Ghani, <i>Paul Wilson</i> , Fabio Zanasi, "Categorical Foundations of Gradient-Based Learning"          | <i>Cole Comfort</i> , Aleks Kissinger, "A Graphical Calculus for Lagrangian Relations"  | <i>Chad Nester</i> , "Situated Transition Systems"   |
|               | <i>George Kaye</i> , Dan R. Ghica, "Rewriting Graphically with Cartesian Traced Categories"  | Tomáš Jakl, Anuj Dawar, Luca Reggιο, "Lovász-Type Theorems and Game Comonads"   | <i>Dan Shiebler</i> , Bruno Gavranovic, Paul Wilson, "Category Theory in Machine Learning"  | Miriam Backens, Aleks Kissinger, Hector Miller-Bakewell, <i>John van de Wetering</i> , Sal Wolffs, "The ZH-calculus: completeness and extensions"                                     | Elena Di Lavore, Alessandro Gianola, <i>Mario Román</i> , Nicoletta Sabadini, Pawel Sobocinski, "A Canonical Algebra of Open Transition Systems (Extended Abstract)" |
|               | <i>Paul Wilson</i> , Fabio Zanasi, "The Cost of Compositionality: A High-Performance Implementation of String Diagram Composition"             | <i>Rowan Poklewski-Koziell</i> , "A note on Frobenius-Eilenberg-Moore objects in dagger 2-categories"   | <i>Dan Shiebler</i> , "Functorial Manifold Learning"  | Alexis Toumi, <i>Richie Yeung</i> , Giovanni de Felice, "Diagrammatic Differentiation for Quantum Machine Learning"   | <i>Gunnar Fløystad</i> , "Profunctors between posets, and Alexander duality"   |
| 13:00 - 14:00 | Lunch Break  | Lunch Break   | Lunch Break   | Lunch Break   | Lunch Break  |
| 14:00 - 15:30 | <i>Sean Tull</i> , "A Categorical Semantics of Fuzzy Concepts in Conceptual Spaces"  | <i>Sophie Libkind</i> , Andrew Baas, Evan Patterson, James Fairbanks, "Operadic Modeling of Dynamical Systems: Mathematics and Computation"   | <i>Matteo Capucci</i> , Neil Ghani, Jérémy Ledent, Fredrik Nordvall Forsberg, "Translating Extensive Form Games to Open Games with Agency"              | <i>Jason Parker</i> , Pieter Hofstra, Philip Scott, "Polymorphic automorphisms and the Picard group"  | <i>Tsilil Clingman</i> , Brendan Fong, David Spivak, "Graphical Regular Logic: the complete 2-dimensional picture"   |
|               | <i>Toby St Clere Smithe</i> , "Polynomial Life: the Structure of Adaptive Systems"   | <i>John Foley</i> , Spencer Breiner, Eswaran Subrahmanian, John Dusel, "Operads for complex system design specification, analysis and synthesis"  | <i>Hans Riess</i> , Paige Randall North, Robert Ghrist, "Network Sheaves Valued in Categories of Adjunctions and their Laplacians"                      | <i>Christian Williams</i> , Michael Stay, "Native Type Theory"  | <i>Guillaume Boisseau</i> , Pawel Sobociński, "String Diagrammatic Electrical Circuit Theory"  |
|               | Matteo Capucci, Bruno Gavranovic, <i>Jules Hedges</i> , Eigil Rischel, "Towards foundations of categorical cybernetics"                        | <i>Jean-Simon Lemay</i> , "Jacobians and Gradients for Cartesian Differential Categories"   | <i>Jérémie Koenig</i> , "Grounding Game Semantics in Categorical Algebra"   | Robin Cockett, <i>Priyaa Varshinee Srinivasan</i> , "Exponential modalities and complementarity"  | Brendan Fong, <i>Alberto Speranzon</i> , David I. Spivak, "Temporal Landscapes: A Graphical Logic of Behavior"   |
| 15:30 - 16:00 | Tea Break  | Tea Break   | Tea Break   | Tea Break   | Tea Break  |
| 16:00 - 17:30 | Industry Session   | Adjoint School Presentation   | Poster Session  | Alexis Toumi, <i>Alex Koziell-Pipe</i> , "Functorial Language Models"   | <i>Razin A. Shaikh</i> , "Characterizing Double Categories of Relations"   |
|               |  |   | Drinks Reception  | <i>Lachlan McPheat</i> , Gijs Wijnholds, Mehmoosh Sadrzadeh, Adriana Correia, Alexis Toumi, "Anaphora and Ellipsis in Lambek Calculus with a Relevant Modality: Syntax and Semantics" | <i>Victoria Noquez</i> , Larry Moss, "The Sierpinski Carpet as a Final Coalgebra"  |
|               |  |   |   | <i>David Spivak</i> , "Learners' languages"   | Anne Broadbent, <i>Martti Karvonen</i> , "Categorical composable cryptography"   |