

| Keynote (35 minutes) | Monday July 6   | Tuesday July 7  | Wednesday July 8   | Thursday July 9   | Friday July 10   |
|----------------------|---|---|--|---|--|
| Regular (20 minutes) |   |   |  |   |  |
| All times UTC        |   |   |  |   |  |
| Session 1            | Chair: David Spivak   | Chair: Martha Lewis   | Chair: Miriam Backens  | Chair: Christina Vasilakopoulou   | Chair: Joachim Kock  |
| 1100 – 1135 (UTC)    | Opening Remarks (20 minutes)  | <i>Bryce Clarke, Derek Elkins, Jeremy Gibbons, Fosco Loregian, Bartosz Milewski, Emily Pillmore and <b>Mario Román</b>. Profunctor Optics, a Categorical Update</i> | <i>Lachlan McPheat, Mehrnoosh Sadrzadeh, <b>Hadi Wazni</b> and Gijs Wijnholds. Categorical Vector Space Semantics for Lambek Calculus with a Relevant Modality</i> | <i><b>Nicolas Blanco</b> and Noam Zeilberger. Bifibrations of Polycategories and Classical Linear Logic</i>                                 | <i><b>Martha Lewis</b>. Towards logical negation in compositional distributional semantics</i>   |
| 1140 – 1200          | <i><b>1125 start: Joachim Kock</b>. Whole-grain Petri nets and processes</i>  | <i>Mario Román. Open Diagrams via Coend Calculus</i>  | <i>Giovanni de Felice, Alexis Toumi and Bob Coecke. DisCoPy: Monoidal Categories in Python</i>   | <i><b>Christine Tasson</b> and Martin Hyland. The linear-non-linear substitution 2-monad</i>  | <i>Bob Coecke, Giovanni de Felice, <b>Konstantinos Meichanetzidis</b>, Alexis Toumi, Stefano Gogioso and Nicolo Chiappori. Quantum Natural Language Processing</i> |
| 1205 – 1210          | Break   | Break   | Break  | Break   | Break  |
| 1210 – 1230          | <i><b>Jules Hedges</b>. Non-compositionality in categorical systems theory</i>  | <i>Bryce Clarke. A diagrammatic approach to symmetric lenses</i>  | <i>Robert Atkey, Bruno Gavranović, Neil Ghani, Clemens Kupke, <b>Jeremy Ledent</b> and Fredrik Nordvall Forsberg. Compositional Game Theory, Compositionally</i>   | <i>Tarmo Uustalu, <b>Niccolò Veltri</b> and Noam Zeilberger. Proof Theory of Partially Normal Skew Monoidal Categories</i>                  | <i><b>Giovanni de Felice</b>, Elena Di Lavore, Mario Román and Alexis Toumi. Functorial Language Games for Question Answering</i>                                  |
| 1235 – 1255          | <i><b>Matthew Wilson</b>, James Hefford, Guillaume Boisseau and <b>Vincent Wang</b>. The Safari of Update Structures: Visiting the Lens and Quantum Enclosures</i>                                      | <i><b>Michael Johnson</b> and Robert Rosebrugh. The more legs the merrier: A new composition for symmetric (multi-)lenses</i>                                       | <i><b>Jules Hedges</b> and Philipp Zahn. Open games in practice</i>  | <i>Paul Wilson and Fabio Zanasi. Reverse Derivative Ascent: A Categorical Approach to Learning Boolean Circuits</i>                         | <i>Marco Benini, <b>Marco Perin</b>, Alexander Alexander Schenkel and Lukas Woike. Categorification of algebraic quantum field theories</i>                        |
|                      |   |   |  |   |  |
| Session 2            | Chair: Prakash Panangaden   | Chair: Helle Hvid Hansen  | Chair: Bob Coecke  |   | Chair: Valeria de Paiva  |
| 1600 – 1635          | <i>Tobias Fritz, <b>Tomáš Gonda</b>, Paolo Perrone and Eigil Rischel. Distribution functors, second-order stochastic dominance and the Blackwell--Sherman--Stein Theorem in Categorical Probability</i> | <i><b>Toby St Clere Smithe</b>. Cyber Kittens, or First Steps Towards Categorical Cybernetics</i>   | <i>Micah Halter, Evan Patterson, Andrew Baas and <b>James Fairbanks</b>. Compositional Scientific Computing with Catlab and SemanticModels</i>                     | <b>1600: Community Values</b>   | <i>Andre Kornell, <b>Bert Lindenhovius</b> and Michael Mislove. Quantum CPOs</i>   |
| 1640 – 1700          | <i><b>Swaraj Dash</b> and Sam Staton. A Monad for Probabilistic Point Processes</i>   | <i><b>Georgios Bakirtzis</b>, Christina Vasilakopoulou and Cody Fleming. Compositional Cyber-Physical Systems Modeling</i>  | <b>Industry Showcase</b>   |   | <i><b>Vladimir Zamdzhiev</b>. Computational Adequacy for Substructural Lambda Calculi</i>  |
| 1705 – 1710          | Break   | Break   |  | Break   | Break  |
| 1710 – 1730          | <i><b>Callum Reader</b>. Measures and Enriched Categories</i>   | <i><b>Gioele Zardini</b>, David I. Spivak, Andrea Censi and Emilio Frazzoli. A Compositional Sheaf-Theoretic Framework for Event-Based Systems</i>                  |  | <b>1715: ACT Business Meeting</b>   | <i><b>Luigi Santocanale</b>. Dualizing Sup-preserving endomaps of a complete lattice</i>   |
| 1735 – 1755          | <i><b>Dan Shiebler</b>. Categorical Stochastic Processes and Likelihood</i>   | <i><b>Joseph Razavi</b> and Andrea Schalk. Gandy Machines Made Easy via Category Theory</i>   |  |   | <i><b>Richard Statman</b>. Products in a category with only one object</i>   |
|                      |   |   |  | <b>1830: Compositionality AGM</b>   | <b>Zoom Social</b>   |
|                      |   |   |  |   |  |
| Session 3            | Chair: Tobias Fritz   | Chair: Mike Shulman   |  | Chair: John Baez  |  |
| 2000 – 2035          | <i><b>Jade Master</b> and John Baez. Open Petri Nets</i>  | <i><b>David Jaz Myers</b>. Double Categories of Open Dynamical Systems</i>  | <b>Poster Session</b>  | <i>Henry Adams, <b>Johnathan Bush</b> and Joshua Mirth. Operations on Metric Thickenings</i>  |  |
| 2040 – 2100          | <i><b>Joe Moeller</b>, John Baez and John Foley. Petri nets with catalysts</i>  | <i><b>John Baez</b> and Kenny Courser. Coarse-graining open Markov processes</i>  |  | <i>Brendan Fong, <b>David Jaz Myers</b> and David I. Spivak. Behavioral Mereology: A Modal Logic for Passing Constraints</i>                |  |
|                      | Break   | Break   |  | Break   |  |
| 2110 – 2130          | <i><b>John Nolan</b> and Spencer Breiner. Symmetric Monoidal Categories with Attributes</i>   | <i><b>David I. Spivak</b>. Poly: An abundant categorical setting for mode-dependent dynamics</i>  |  | <i>Geoffrey Cruttwell, <b>Jonathan Gallagher</b> and Dorette Pronk. Categorical semantics of a simple differential programming language</i> |  |
| 2135 – 2155          | <i><b>Dmitry Vagner</b>, David I. Spivak and Evan Patterson. Wiring diagrams as normal forms for computing in symmetric monoidal categories</i>   | <i><b>Daniel Cicala</b>. Rewriting Structured Cospans</i>   |  | <i><b>Rocco Gangle</b>, Gianluca Caterina and Fernando Tohme. A Generic Figures Reconstruction of Peirce's Existential Graphs (Alpha)</i>   |  |