REFERENCES

APPLIED CATEGORY THEORY 2019

JOHN C. BAEZ

References

- [1] S. Abramsky and B. Coecke, A categorical semantics of quantum protocols, in *Handbook* of Quantum Logic and Quantum Structures, Elsevier, Amsterdam, 2009. Also available at arXiv:quant-ph/0402130.
- [2] S. Abramsky, J. C. Baez, F. Gadducci and V. Winschel, Categorical Methods at the Crossroads, Report from Dagstuhl Perspectives Workshop 14182, 2014. Available at http://drops.dagstuhl.de/opus/volltexte/2014/4618/.
- [3] L. de Francesco Albasini, N. Sabadini and Robert F. C. Walters, The compositional construction of Markov processes, *Appl. Cat. Str.* **19** (2011), 425–437. Also available as arXiv:0901.2434.
- [4] M. A. Arbib and E. G. Manes. A categorist's view of automata and systems, in *Category Theory Applied to Computation and Control*, E. G. Manes (ed.), Springer, Berlin, 2005.
- [5] J. C. Baez and B. Fong. A compositional framework for passive linear networks. Available at arXiv:1504.05625.
- [6] J. C. Baez, B. Fong and B. Pollard, A compositional framework for Markov processes, JourMath. Phys. 57 (2016), 033301. Also available as arXiv:1508.06448.
- [7] J. C. Baez, T. Fritz and T. Leinster, A characterization of entropy in terms of information loss, *Entropy* **13** (2011), 1945–1957. Also available as arXiv:1106.179.
- [8] J. C. Baez and B. Pollard, A compositional framework for reaction networks, *Rev. Math. Phys.* **29**, 1750028. Also available as arXiv:1704.02051.
- [9] J. C. Baez and M. Stay, Physics, topology, logic and computation: a Rosetta Stone, in New Structures for Physics, ed. Bob Coecke, Springer, Berlin, 2011. Also available as arXiv:0903.0340.
- [10] J. C. Baez and J. Erbele, Categories in control, Th. Appl. Cat. 30 (2015), 836–881. Also available as arXiv:1405.6881.
- [11] F. Bonchi, P. Sobociński and F. Zanasi, A categorical semantics of signal flow graphs, in CONCUR 2014-Concurrency Theory, eds. P. Baldan and D. Gorla, Lecture Notes in Computer Science vol. 8704, Springer, Berlin, 2014, pp. 435-450. Also available at https://pdfs.semanticscholar.org/c908/47fld138c9b44aaed72bcd59c9ec1915d395.pdf.
- [12] S. Breiner, A. Jones, D. Spivak, E. Subrahmanian and R. Wisnesky, Using category theory to facilitate multiple manufacturing service database integration, ASME Journal of Computing and Information Science in Engineering 17 (2017), 021011. Available at http://computingengineering.asmedigitalcollection.asme.org/article.aspx?articleid=2539429.
- [13] C. Cobbold and T. Leinster, Measuring diversity: the importance of species similarity, *Ecology* 93 (2012), 477–489. Also available at http://www.maths.ed.ac.uk/~tl/mdiss.pdf
- [14] R. Crole, Categories for Types, Cambridge U. Press, Cambridge, 1994.

- [15] M. Freedman, A. Kitaev, M. Larsen and Z. Wang, Topological quantum computation, Bulletin of the AMS 2003 40, 31–38. Also available at arXiv:quant-ph/0101025.
- [16] D. R. Ghica and A. Jung, Categorical semantics of digital circuits, in Proceedings of the 16th Conference on Formal Methods in Computer-Aided Design, R. Piskac and M. Talupur (eds.), Springer, Berlin, 2016. Also available at https://www.cs.bham.ac.uk/~drg/papers/fmcad16.pdf.
- [17] D. Kartsaklis, M. Sadrzadeh, S. Pulman and B. Coecke, Reasoning about meaning in natural language with compact closed categories and Frobenius algebras, in *Logic and Algebraic Structures in Quantum Computing and Information*, Cambridge U. Press, Cambridge, 2013. Also available as arXiv:1401.5980.
- [18] T. Leinster, The magnitude of metric spaces, Doc. Mathematica 18 (2013), 857–905. Also available as arXiv:1012.5857.
- [19] E. Grefenstette and M. Sadrzadeh, Experimental support for a categorical compositional distributional model of meaning, Proceedings of the Conference on Empirical Methods in Natural Language Processing, Association for Computational Linguistics, 2011, 1394–1404. Also available as arXiv:1106.4058.
- [20] B. C. Pierce, Basic Category Theory for Computer Scientists, MIT Press, Cambridge Massachusetts, 1991.
- [21] E. Moggi, Notions of computation and monads, Information and Computation 93 (1991), 55–92.
- [22] G. Plotkin, A calculus of chemical systems, in In Search of Elegance in the Theory and Practice of Computation: Essays Dedicated to Peter Buneman eds. V. Tannen, et al, Springer, Berlin, 2013, pp. 445–465. Also available at http://homepages.inf.ed.ac.uk/gdp/publications/CCS.pdf.
- [23] E. Riehl, The Kan Extension Seminar: an experimental online graduate reading course, AMS Notices 61 (2014), 1357–1358. Also available at http://www.ams.org/notices/201411/rnotip1357.pdf.
- [24] E. Riehl, Categories in Context, Dover, New York, 2016. Also available at http://www.math.jhu.edu/eriehl/context.pdf.
- [25] P. Selinger and B. Valiron, Quantum lambda calculus, in Simon Gay and Ian Mackie, eds., Semantic Techniques in Quantum Computation, Cambridge U. Press, Cambridge, 2009, pp. 135–172. Also available at arXiv:quant-ph/0307150.
- [26] D. I. Spivak, Functorial data migration, Information and Communication 217 (2012), 31–51. Also available as arXiv:1009.1166.
- [27] D. I. Spivak and R. E. Kent, Ologs: a categorical framework for knowledge representation, *PLoS ONE* (2012), e24274. Also available as arXiv:1102.1889.
- [28] D. I. Spivak, Category Theory for Scientists, MIT Press, Cambridge Massachusetts, 2014.
- [29] D. I. Spivak, C. Vasilakopoulou and P. Schultz, Dynamical systems and sheaves. Available at arXiv:1609.08086.
- [30] D. Vagner, D. I. Spivak and E. Lerman, Algebras of open dynamical systems on the operad of wiring diagrams, Th. Appl. Cat. 30 (2015), 1793–1822. Also available at arXiv:1408.1598.
- [31] R. Wisnesky, D. I. Spivak, P. Schultz and E. Subrahmanian, Functorial data migration: from theory to practice. Also available as arXiv:1502.05947.