

Cyclic Proof for Quantitative Logics

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I will talk about ongoing work with Matteo Mio (University of Cambridge) to build useful proof systems for quantitative fixed-point logics. Our approach adapts cyclic-proof-based sequent calculi to the quantitative setting. Several technical issues arise, not all of which have been resolved. The overall aim of the programme is to develop machinery for reasoning about probabilistic concurrent systems. But the talk will focus on proof-theoretic issues, in a purely logical setting.