
MICHAEL WOLMAN, Caltech

Probabilistic Programming Semantics for Name Generation

In this talk we present a probabilistic model for name generation. Specifically, we interpret the nu-calculus, a simply-typed lambda-calculus with name generation, in the category of quasi-Borel spaces, an extension of the category of standard Borel spaces supporting both measure theory and higher-order programming. We prove that this model is fully abstract at first-order types. This is joint work with Marcin Sabok, Sam Staton and Dario Stein.