A modal logic for computability

Dana S. Scott*

In this talk we report on part of the research on the Logic of Types and Computation at Carnegie Mellon University [1], as outlined in the talk by Steven Awodey.

We describe how the modal logic for localic local maps of toposes described in the talk by Birkedal is interpreted in the realizability setting arising from a partial combinatory algebra A and a sub-pca $A_\sharp \subseteq A$. We also present a couple of further useful principles valid in this particular model.

References

[1] D.S. Scott et. al., *Logics of Types and Computation at Carnegie Mellon University*, http://www.cs.cmu.edu/Groups/LTC/.

*Joint work with Steven Awodey and Lars Birkedal.