

A Duality for Modal De Vries Algebras

Nick Bezhanishvili

This is joint work with G. Bezhanishvili and J. Harding.

Abstract: De Vries duality establishes a dual equivalence between the category of compact Hausdorff spaces and the category of De Vries algebras - complete Boolean algebras with an additional binary relation. A modal (Esakia) duality obtains a dual equivalence between the category of Stone spaces with an additional binary relation and the category of modal algebras - Boolean algebras with an extra operator. In this talk, I will combine these two approaches and extend the two dualities to a duality between the category of modal De Vries algebras and the category of compact Hausdorff spaces with an additional binary relation.