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First-Order Modal Logic and Topological Semantics

Reihane Zoghifard IPM

While propositional modal logic has been extensively studied, research on first-order modal logic (FOML) remains limited, especially with topological semantics. Moreover, some topological incompleteness results in FOML suggest that first-order extensions may introduce complexities not present in the propositional case. In this talk, I will review key developments in this area and explore definability challenges associated with topological semantics.