Algebraic Analyses Of Bimodal Symmetric Intuitionistic Logic

Phridon Alshibaia

E-mail : pridoni.alshibaia282@ens.tsu.edu.ge

Department of mathematics, I. Javakhishvili Tbilisi State University, Chavchavadze av. 1

A "symmetric" formulation of intuitionistic propositional calculus (Int^2), suggested by various authors (G. Moisil, A. Kuznetsov, C. Rauszer), presupposes that each of the connectives $\&, \vee, \rightarrow, \top, \bot$ has its dual $\vee, \&, \twoheadrightarrow, \bot, \top$ and the duality principle of the classical logic is restored. In my work I will investigate symmetric intuitionistic logic, the language of which is enriched by two modalities $\square$ and $\lozenge$. I will investigate Algebraic models (which are Heyting algebras) and Topological models of this logic.