

Completeness for Conditional Intuitionistic Logic

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Philosophers and logicians alike have often taken issue with the traditional understanding of implication. Classically, there is a robust study of conditionals, operators which preserve the intuition of implication without its philosophical baggage. In recent years there has been work to bring Chellas's basic condition into intuitionistic logic.

In this talk I discuss Intuitionistic Conditional Logic (ICK), and its corresponding, frames, spaces, and algebras. I introduce a novel extension of Esakia duality and algebraic/topological filtrations in order to prove a survey of completeness results. These results in turn highlight how the weak conditional operator encodes a surprisingly complex and interesting topological structure.