

analizaremos sus distintos comportamientos, tanto respecto a su regularidad (o sea, la preservación de ínfimos y supremos arbitrarios), como respecto a la preservación en las distintas subvariedades de álgebras de Heyting, poniendo especial énfasis en las subvariedades amalgamables.

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On some semi-intuitionistic logics

J. M. Cornejo and I. D. Viglizzo

Departamento de Matemática, Universidad Nacional del Sur

Semi-intuitionistic logic is the logic counterpart to semi-Heyting algebras, which were defined by H. P. Sankappanavar in [3] as a variety generalizing the one of Heyting algebras while retaining some important features, like the fact that they are all pseudocomplemented distributive lattices and their congruences are determined by filters. Semi-Heyting algebras are algebras $\mathbf{A} = \langle A, \vee, \wedge, \rightarrow, \top, \perp \rangle$ that satisfy the conditions:

- (SH1) $\langle A, \vee, \wedge, \top, \perp \rangle$ is a bounded lattice
- (SH2) $x \wedge (x \rightarrow y) \approx x \wedge y$
- (SH3) $x \wedge (y \rightarrow z) \approx x \wedge [(x \wedge y) \rightarrow (x \wedge z)]$
- (SH4) $x \rightarrow x \approx \top$.

We present a new, more streamlined set of axioms for semi-intuitionistic logic, which we prove translationally equivalent to the one introduced in [1]. We then study some formulas that define a semi-Heyting implication, and specialize this study to the case in which the formulas use only the lattice operators and the intuitionistic implication. We prove then that all the logics thus obtained are equivalent to intuitionistic logic, and give their Kripke semantics.

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