

Semihoop-Triples and subcategories of MTL-algebras

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Abstract

In my master thesis, together with Franco Montagna, we provided a categorical equivalence between the algebraic category of product algebras and a category whose objects are triples (B, C, \vee_e) made of a boolean algebra B , a cancellative hoop C and an external operator \vee_e representing the natural join between cancellative and boolean elements. In this talk we will see how this result can be generalized, starting from triples (B, H, \vee_e) where now H is a prelinear semihoop, and we will also consider other constructions obtained using Cignoli-Torrens dI -admissible operators in order to get different notable subvarieties of MTL-algebras.