On elementary equivalence in Fuzzy Predicate Logics

Title: On elementary equivalence in Fuzzy Predicate Logics
Publication Type: Journal Article
Year of Publication: 2013
Authors: Dellunde P [1], Esteva F [2]
Journal: Archive for Mathematical Logic
Volume: 52
Pagination: 1-17
Publisher: Springer-Verlag

Keywords: Elementary Extensions [3], fuzzy predicate logics [4], Mathematical Logic and Foundations [5], model theory [6], Quasi-witnessed Models [7], Witnessed Models [8]

Abstract: Our work is a contribution to the model theory of fuzzy predicate logics. In this paper we characterize elementary equivalence between models of fuzzy predicate logic using elementary mappings. Rening the method of diagrams we give a solution to an open problem of P. Hajek and P. Cintula (Conjectures 1 and 2 of [HaCi06]). We investigate also the properties of elementary extensions in witnessed and quasiwitnessed theories, generalizing some results of Section 7 of [HaCi06] and of Section 4 of [CeEs11] to non-exhaustive models.

Source URL: https://www.iiia.csic.es/en/node/53928

Links: