A generalization of the Stone Duality Theorem

Georgi Dimov^{*1}, Elza Ivanova-Dimova, Dimiter Vakarelov

gdimov@fmi.uni-sofia.bg, elza@fmi.uni-sofia.bg, dvak@fmi.uni-sofia.bg

We prove a new duality theorem for the category of precontact algebras which implies the Stone Duality Theorem, its connected version obtained recently in [1], the recent duality theorems from [2] and [3], and some new duality theorems for the category of contact algebras and for the category of complete contact algebras.

- G. Dimov and D. Vakarelov, *Topological representations of precon*tact algebras and a connected version of the Stone Duality Theorem - I, Topology Appl. (see also arXiv:1508.02220v4) (2017 (to appear)), 1–44
- [2] G. Bezhanishvili, N. Bezhanishvili, S. Sourabh, and Y. Venema, *Irreducible Equivalence Relations, Gleason Spaces, and de Vries Duality*, Appl. Categor. Struct. (2016 (to appear)), 1–21
- [3] R. Goldblatt and M. Grice, Mereocompactness and duality for mereotopological spaces, In: Katalin Bimbo (Ed.), J. Michael Dunn on Information Based Logics (2016 (to appear)), 1–18

Copyright © Dimov

¹ The first and the second authors were partially supported by the contract no. 14/2016 "Precontact algebras, dualities and hyperspaces" of the Sofia University "St. Kl. Ohridski" Science Fund.



