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An adjoint pair for intuitionistic L -fuzzy values. (English) [Zbl 1430.68334](#)

Cornejo, María Eugenia (ed.) et al., Trends in mathematics and computational intelligence. Selected papers based on the presentations at the 9th European symposium on computational intelligence and mathematics, ESCIM 2017, Faro, Portugal, October 4–7, 2017. Cham: Springer. Stud. Comput. Intell. 796, 167-173 (2019).

Summary: We continue our prospective study of the generalization of formal concept analysis in terms of intuitionistic L -fuzzy sets. The main contribution here is an adjoint pair in the set \mathcal{L}_{ILF} of intuitionistic L -fuzzy values associated to a complete residuated lattice \mathcal{L} , which allows the definition of a pair of derivation operators which form an antitone Galois connection.

For the entire collection see [\[Zbl 1404.68011\]](#).

MSC:

- [68T30](#) Knowledge representation
- [06A15](#) Galois correspondences, closure operators (in relation to ordered sets)
- [06B23](#) Complete lattices, completions
- [06F05](#) Ordered semigroups and monoids
- [68T37](#) Reasoning under uncertainty in the context of artificial intelligence

Cited in **2** Documents

Keywords:

formal concept analysis; complete residuated lattice; Atanassov's intuitionistic fuzzy sets

Full Text: [DOI](#)

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