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Disjunctive multiple-conclusion consequence relations. (English) Zbl 1446.06007
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Summary: The concept of multiple-conclusion consequence relation from [*D. J. Shoesmith* and *T. J. Smiley*, Multiple-conclusion logic. Cambridge etc.: Cambridge University Press (1978; [Zbl 0381.03001](#))] and [*D. Scott*, Proc. Symp. Pure Math. 25, 411–435 (1974; [Zbl 0318.02021](#))] is considered. The closure operation C assigning to any binary relation r (defined on the power set of a set of all formulas of a given language) the least multiple-conclusion consequence relation containing r , is defined on the grounds of a natural Galois connection. It is shown that the very closure C is an isomorphism from the power set algebra of a simple binary relation to the Boolean algebra of all multiple-conclusion consequence relations.

MSC:

[06A15](#) Galois correspondences, closure operators (in relation to ordered sets)
[03B50](#) Many-valued logic

Keywords:

[multiple-conclusion consequence relation](#); [closure operation](#); [Galois connection](#)

Full Text: [DOI](#)

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