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On complete congruence lattices of join-infinite distributive lattices. (English)
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In 1997, G. Grätzer and E. T. Schmidt raised the problem of characterizing the complete congruence lattices of complete lattices satisfying JID and MID. They proved the theorem: Any complete lattice with more than two elements and with meet-irreducible zero cannot be represented as the lattice of complete congruences of a complete lattice satisfying JID and MID. The author generalizes this result: Theorem 1.2. The lattice of complete congruences of every double frame is a zero-dimensional frame (i.e. its elements are joins of complemented elements).

Ivan Chajda (Olomouc)

Keywords : complete congruence; join-infinite distributive identity; double frame

Classification :

*06D22 Frames etc.

06B10 Ideals, etc. (lattices)

06D05 Structure and representation theory of distributive lattices