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ON BALANCED ORDER RELATIONS AND THE NORMAL HULL OF COMPLETELY SIMPLE SEMIRINGS

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Abstract

In [1] the authors proved that a semiring S is a completely simple semiring if and only if S is isomorphic to a Rees matrix semiring over a skew-ring R with sandwich matrix P and index sets I and Λ which are bands under multiplication. In this paper we characterize all the balanced order relations on completely simple semirings. Also we study the normal hull of a completely simple semiring.

Keywords: skew-ring, Rees matrix semiring, balanced order relation, essential extension, normal extension, normal ideal, normal hull.

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