

Mathematical Colloquia

Monday, 16 October 2017

17:15 h, Lecture Room B 78

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Idempotent residuated lattices and other related algebras

Abstract:

Residuated lattices (RLs) are algebras of special interest in Logic, as they provide algebraic semantics for certain families of logics known as substructural logics. We will examine some classes of residuated lattices such as the variety of semilinear idempotent RLs and the class of conservative commutative RLs. We will prove representation theorems, which we will use to count its finite members. We will also show the connection between Sugihara monoids and semilinear commutative idempotent RLs, and prove that this class satisfies the amalgamation property.