

**Anna Zamojska-Dzienio**  
*Medial modes and rectangular algebras*

Comment.Math.Univ.Carolinae 47,1 (2006) 21-34.

**Abstract:** Medial modes, a natural generalization of normal bands, were investigated by Płonka. Rectangular algebras, a generalization of rectangular bands (diagonal modes) were investigated by Pöschel and Reichel. In this paper we show that each medial mode embeds as a subreduct into a semimodule over a certain ring, and that a similar theorem holds for each Lallement sum of cancellative modes over a medial mode. Similar results are obtained for rectangular algebras. The paper generalizes earlier results of A. Romanowska, J.D.H. Smith and A. Zamojska-Dzienio.

**Keywords:** modes (idempotent and entropic algebras), cancellative modes, sums of algebras, embeddings, semimodules over semirings, idempotent subreducts of semimodules

**AMS Subject Classification:** Primary: 08A05; Secondary: 03C05, 08C15