## Vector subgroupoids. The computation of all vector subgroupoids of a modular vector groupoid

## GHEORGHE IVAN and VASILE POPUŢA

## Abstract.

A vector groupoid is an algebraic structure which combines the concepts of groupoid and vector space such that these are compatible. In this paper we study the vector subgroupoids. Also, the vector subgroupoids of a modular vector groupoid are computed.

DEPARTMENT OF MATHEMATICS WEST UNIVERSITY OF TIMIŞOARA V. PÂRVAN 4, 300223 TIMIŞOARA, ROMANIA *E-mail address*: ivan@math.uvt.ro *E-mail address*: vpoputa@yahoo.com

Received: 12.08.2011; In revised form: 28.12.2011; Accepted: 23.04.2012 2010 *Mathematics Subject Classification*. 20L13, 20L99. Key words and phrases. *Groupoid, vector groupoid, vector subgroupoid*. Corresponding author: Gheorghe Ivan; ivan@math.uvt.ro