

1090-47-310

Adam H. Fuller* (afuller7@math.unl.edu), University of Nebraska - Lincoln, and **David R. Pitts**, University of Nebraska - Lincoln. *The Lattice of Bures-Closed Bimodules in Cartan Pairs.*

Let M be a von Neumann algebra and let D be a Cartan maximal abelian subalgebra of M . The study of the σ -weakly closed D -bimodules in M has been a topic of interest for quite sometime.

Recently, Cameron, Pitts and Zarikian have established a connection between the σ -weakly closed D -bimodules and the less familiar Bures-closed D -bimodules.

In this talk, we continue the study of the Bures-closed bimodules. In particular, when M is separably acting and D is diffuse, we show that the lattice of Bures-closed bimodules has very little to do with the von Neumann algebra M . The case when D has atomic projections will also be discussed.

This is joint work with David R. Pitts. (Received March 04, 2013)