Jeremy F Alm* (almjf@iastate.edu), 396 Carver Hall, ames, IA 50011. Edge Colorings and Weak Representations. Preliminary report.

A relation algebra is a boolean algebra with operators corresponding to operations on binary relations. Such an algebra is said to be *representable* if it is isomorphic to a collection of actual binary relations. In this talk we will consider whether a non-representable relation algebra can have a weak representation (an embedding into an algebra of relations that does not preserve + or -) over a finite set. (Received September 27, 2005)