Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

Jianfeng Wu* (wuj@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. Constructing New Simple Representable Relation Algebras with Forcing. Preliminary report.

Relation algebras were conceived by Tarski as the means to capture the algebra of binary relations. In roughly the same way, Boolean algebras capture the algebra of sets. Tarski established that Q-relation algebras offer the means to express Zermelo-Fraenkel set theory by means of equations without variables. We report on the use of Cohen's method of forcing to construct new simple representable relation algebras from those at hand. (Received October 04, 2004)