Meeting: 1007, Santa Barbara, California, SS 6A, Special Session on Geometric Methods in Three Dimensions

1007-57-67

J. Hyam Rubinstein\* (rubin@mathy.ucdavis.edu), Department of Mathematics, UCDavis, Davis, CA 95616, Michel Boileau, Toulouse University, and Shicheng Wang, Beijing University. Finiteness of 3-manifolds via non-zero degree mappings.

The main result is that a given closed orientable 3-manifold dominates at most finitely many geometrisable 3-manifolds which are integral homology 3-spheres. The result builds on work of many other authors - the main new ingredient is to prove a finiteness result for boundary patterned guts of closed orientable 3-manifolds. (Received January 28, 2005)