

Topology Seminar

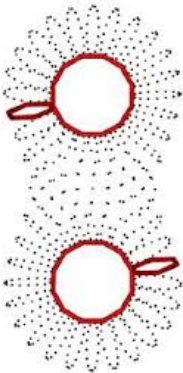
Friday, 2018, March 2, 11:00-11:50 a.m., in DERR 334

Speaker: Dr. David Snyder

Title: *Continuous actions of finite groups on S^3 and maps on 4-manifolds with circle-like fibers*

ABSTRACT

In this talk, we present a recent result of Benedetti (of Univ. Trieste), in which he proves that the only finite, nonabelian simple group with a topological action on S^3 , or on any homology 3-sphere for that matter, is the alternating/dodecahedral group on 5 symbols. We then apply this result to construct certain circle bundles over certain closed 3-manifolds, yielding some insight into the more general question of whether there are codimension-3 manifold-like decompositions of a 4-manifold that are not the result of a locally smooth S^1 action on the 4-manifold.



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