Some open problems about mapping class groups of surfaces

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Thursday, March 31, 2005 L02 Carson Hall, 4:00 pm (Tea 3:30 pm Math Lounge)

Abstract

This talk will be about the many ways that group-theoretic structure in the mapping class group of a surface goes hand-in-hand with geometric structure in the topology of 3-manifolds. It will focus on the most recent evidence of this dichotomy, a measure of the complexity of an element in the mapping class group that was introduced by John Hempel in 2002. It is known as the "distance" of a Heegaard splitting.

This talk will be accessible to grad students who have passed their quals.