Department of Mathematics and Computer Science

September 26, 2008

Friday, September 26, 4:00

COLLOQUIUM

Speaker: Kamlesh Parwani

Title: "C^1 actions of the mapping class group on the circle"

Old Main 2231

Abstract: Let S be a connected orientable surface with finitely many punctures, finitely many boundary components, and genus at least 6. Then any C^1 action of the mapping class group of S on the circle is trivial.

The techniques used in the proof of this result permit us to show that products of Kazhdan groups and certain lattices cannot have C^1 faithful actions on the circle. We also prove that for $n \geq 6$, any C^1 action of $Aut(F_n)$ or $Out(F_n)$ on the circle factors through an action of $\mathbb{Z}/2\mathbb{Z}$.
