TOPOLOGY Seminar

Filling invariants at infinity

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Abstract: The k-dimensional isoperimetric function of a space captures the difficulty of filling k-spheres with (k + 1)-balls in the space. Once one understands the isoperimetric functions of a space, it is interesting to study how they change when an obstruction is introduced. In this spirit, Brady and Farb introduced the notion of "filling invariants at infinity", by considering the volume required to fill spheres in Hadamard manifolds, provided both the sphere and the filling are far from a fixed basepoint.

I will talk about group theoretic version of this concept, and describejoint work with Aaron Abrams, Noel Brady, Moon Duchin and Robert Young on the case of right-angled Artin groups.

Wednesday, November 17, 2010, 2:00 pm Mathematics and Science Center: E408

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