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Mathematics Seminar

Speaker: Dr. Jie Xiao

Affiliation: Memorial University

Date: Wednesday, January 18, 2012

Time: 2:00 p.m.

Room: HH-3017

Title: **Isoperimetry for Semilinear Torsion Problems in Riemannian Two-manifolds**

Abstract:

Given (M^2, g) -- a smooth, complete Riemannian 2-manifold. This talk will discuss three types of isoperimetric properties arising from $u(z) = \int_O g_{(O, g)}(z) u^\gamma dA_g$, the non-negative solution to the semilinear ($0 \leq \gamma < 1$) torsion problem $\Delta_g u = -u^\gamma$ in O subject to $u|_{\partial O} = 0$ for a relatively compact domain $O \subset M^2$ with smooth boundary ∂O .