CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, February 24/06 2:00 – 3:00 PM Maria Sanford, Room 101

CAPACITIES AND EIGENVALUE ESTIMATES NELSON CASTANEDA

CENTRAL CONNECTICUT STATE UNIVERSITY

ABSTRACT

We will illustrate the role that various notions of capacity play on estimating the principal eigenvalue for powers of the Laplace operator on Riemannian manifolds. The first part of the talk will introduce the basic concepts at an elementary level. The second part will be a report on recent joint results with T. Bagby from Indiana University.

AFTERMATH: Refreshments will follow the colloquium at Castaneda's (1590 Stanley St. – across from the administration building)

> *For further information:* <u>gotchevi@ccsu.edu</u> 860-832-2839 <u>castanedan@ccsu.edu</u> 860-832-2851