CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, November 20 2:00 – 3:00 PM Maria Sanford, Room 101

DISTINGUISHED VECTOR FIELDS AND CONSTANT ENERGY ON MANIFOLDS

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<u>Abstract</u>: Certain distinguished classes of vector fields such as parallel, concircular, concurrent, are defined in terms of properties of their covariant derivatives. We explore the restrictions imposed on the geometry of a manifold by the presence of distinguished vector fields. From this perspective we explain some classical theorems about the first eigenvalue of the Laplace operator on manifolds.

Aftermath to follow at Castaneda's (1590 Stanley Street, across from Davidson's Hall)

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/gotchev/colloquium/