GCOE Lectures at the University of Tokyo

GCOE

DATE   November 5 (Fri), 2010, 16:30–18:00

PLACE   Room 123, Graduate School of Mathematical Sciences

SPEAKER   **Michael Eastwood** (Australian National University)

TITLE   How to recognise the geodesics of a metric connection

ABSTRACT   The geodesics on a Riemannian manifold form a distinguished family of curves, one in every direction through every point. Sometimes two metrics can provide the same family of curves: the Euclidean metric and the round metric on the hemisphere have this property. It is also possible that a family of curves does not arise from a metric at all. Following a classical procedure due to Roger Liouville, I shall explain how to tell these cases apart on a surface. This is joint work with Robert Bryant and Maciej Dunajski.

ORGANIZER   Toshiyuki Kobayashi