BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

MONOTONE LAGRANGIAN SUBMANIFOLDS IN COTANGENT BUNDLES

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September 20, 2017, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: As an attempt to classify Lagrangian submanifolds and due to their importance in Floer theory, monotone Lagrangian submanifolds have been got attention. In this talk, we provide a way producing monotone Lagrangian submanifolds in the cotangent bundles of some manifolds including spheres or unitary groups. The construction is based on the classification of Lagrangian fibers of a certain completely integrable system on partial flag manifolds of various types. After discussing the construction, we compare produced Lagrangians in cotangent bundles. We then discuss when their Floer cohomologies (under a certain deformation by non-unitary flat line bundles) do not vanish. This talk is based on joint works with Yunhyung Cho and Yong-Geun Oh.

See `http://math.bu.edu/research/geom/seminar.html` or contact Yoosik Kim (*yoosik@bu.edu*) or Siu-Cheong Lau (*lau@math.bu.edu*) for more information.