## BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

## FLOER THEORY AND HAMILTONIAN DYNAMICS OF TONELLI HAMILTONIANS

Yong-Geun Oh IBS Center for Geometry and Physics/Postech

> November 15, 2017, 4:00 – 5:00pm Math/Computer Science, Room 148 111 Cummington Street, Boston

> > Tea: 3:45pm in Room 144

**Abstract:** In this talk, I will explain how the analytical machinery of Floer homology can be used to study problems in Hamiltonian dynamics, especially in Aubry-Mather theory and weak KAM theory. As an application, we will explain how this can be used to generalize a result by M.-C. Arnaud to the class of Lipschitz-exact Lagrangians: any such Lagrangian submanifold must be a graph provided it is invariant under a Tonelli Hamiltonian. The latter result is based on the joint work with Amorim and Oliveira Dos Santos.

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.