

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

## ISOMETRIC EMBEDDINGS VIA HEAT KERNEL

**Ke Zhu**  
(Harvard)

Oct 2, 2013, 4:00 – 5:00pm  
Math/Computer Science, Room 148  
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

**Abstract:** We combine the heat kernel embedding and Gunthers implicit function theorem to obtain isometric embeddings of compact Einstein manifolds into Euclidean spaces. As the heat flow time  $t \rightarrow 0$ , the second fundamental form of the embedded images has certain normal form, and the mean curvature vectors converge to (large) constant length. These embeddings are canonical in the sense that they are constructed by the eigenfunctions of the Laplacian and intrinsic perturbations. This is a joint work with Xiaowei Wang.

See <http://math.bu.edu/research/geom/seminar.html> or contact Si Li [sili@math.bu.edu](mailto:sili@math.bu.edu) for more information.