



NYU-ECNU Institute of Mathematical Sciences at NYU Shanghai

LITERATURE AND WORKING SEMINAR

Topic: Embedding Riemannian Manifolds with Heat Kernels and Eigenfunctions

Speaker: Jacobus W Portegies, Ph.D. Candidate at NYU's Courant
Institute of Mathematical Sciences

Time: 14:30-16:30, 10 October 2013

Venue: Room 371, Geography Building, 3663 Zhongshan Road North, Shanghai
(华东师范大学中山北路校区, 地理楼 371 室)

ABSTRACT OF THE TALK

We will discuss how any closed Riemannian Manifold can be embedded in Euclidean space either using the first N eigenfunctions of the Laplace operator, or the heat kernels from N points on the manifold. Here, N only depends on the dimension, the volume, the injectivity radius and a lower bound on the Ricci Curvature.

BIOGRAPHY

Jacobus Portegies is a Ph.D. candidate at NYU's Courant Institute of Mathematical Sciences, working under Fanghua Lin. He received his M.S. in Applied Mathematics and Physics from Eindhoven University of Technology in 2009. He is visiting NYU Shanghai for the Fall 2013 semester.