

Deborah Michel (Université de Rouen) : *Floer Homology for the Laplace's Rayleigh quotient.*

Abstract : In finite dimension, one way to compute the homology of a compact, smooth riemannian manifold (M, g) is by Morse theory. Floer homology is an adaptation of Morse homology to infinite dimensions. We compute such a homology for the gradient flow lines of the Rayleigh quotient associated with the Laplace operator, defined on the infinite dimensional Hilbert space $H_0^{1,2}(\Omega)$.