YANLI SONG, University of Toronto
Localization of fundamental K-homology classes

In this talk, I will talk about the distinguished K-homology fundamental classes associated to Riemannian manifolds with compact Lie groups action. This class was introduced by Kasparov and defined using the de Rham differential operators. With some vector fields on the manifolds, we can define perturbed fundamental classes which live in the K-homology of crossed product of C*-algebra and obtain a localization formula. This provides a K-homological approach to transversally elliptic operators.