THE L^2 ALEXANDER TORSION FOR 3-MANIFOLDS AND SUTURED MANIFOLD THEORY

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Time: Fri, May 23, 16:00-18:00pm
Venue: Room 106, SCMS

Abstract:

The L^2-Alexander torsion is an invariant associated to a 3-manifold and an 1-cohomology class. This invariant is a real function with many properties similar to the classical Alexander polynomial. In this talk, I will first review the basics of L^2-theory of 3-manifolds (e.g. L^2-betti numbers, L^2-torsions), then discuss the "leading coefficient" of the L^2-Alexander torsion and show its connection with Gabai's sutured manifold theory and the guts theory recently developed by Agol-Zhang.