



istanbul matematiksel bilimler merkezi
istanbul center for mathematical sciences

COMBINATORIAL HEEGAARD FLOER THEORY

Ciprian Manolescu

University of California, Los Angeles

Abstract

Starting with the work of Donaldson in the 1980s, gauge theory has been used to get nontrivial information about smooth 4-manifolds. Heegaard Floer theory is a symplectic replacement for gauge theory, with similar topological applications. Recently, the Heegaard Floer invariants (of knots, links, 3-manifolds, and 4-manifolds) were shown to be algorithmically computable. In particular, this gives a simple algorithm for detecting the genus of a knot.

Date : Monday, June 4, 2012

Time: 14:00

Place: IMBM Seminar Room, Boğaziçi University South Campus

This visit is sponsored by the Gökova Geometry/Topology Conference.