"A polyhedron comparison theorem in positive scalar curvature"

Chao Li
(Stanford)

Abstract: We establish a comparison theorem for polyhedra in 3-manifolds with nonnegative scalar curvature, answering affirmatively a dihedral rigidity conjecture by Gromov. For a large collections of polyhedra with interior non-negative scalar curvature and mean convex faces, we prove the dihedral angles along its edges cannot be everywhere less or equal than those of the corresponding Euclidean model, unless it is a isometric to a flat polyhedron.

Wednesday, December 6th, 2017
MIT, Room 2-131
Time: 4:00 PM