Oklahoma State University

Topology Seminar

Title

PL-surfaces in homology 4-balls

Speaker: Jennifer Hom, Georgia Institute of Technology
Date: Feb 23, 2023
Time: 4:00 PM
Room: MSCS 514

Abstract: We consider manifold-knot pairs (Y, K) where Y is a homology 3-sphere that bounds a homology 4-ball. Adam Levine proved that there exists pairs (Y, K) such that K does not bound a PL-disk in any bounding homology ball. We show that the minimum genus of a PL surface S in any bounding homology ball can be arbitrarily large. The proof relies on Heegaard Floer homology. This is joint work with Matthew Stoffregen and Hugo Zhou.

This talk is part of the Distinguished Women in Mathematics Colloquium Series.