



The Math Colloquium
Department of Mathematics
San José State University



Ko Honda

USC (visiting Stanford)

An invitation to Floer homology

APRIL 24, 2013, MH320

Abstract: “Floer homology” is a generic term for various homology theories of knots, 3- and 4-dimensional manifolds (aka spaces), symplectic manifolds, contact manifolds, etc., and has had an enormous impact in geometry/topology since its introduction by Floer more than twenty years ago. In this talk we start with a baby version of this theory called Morse homology, which gives a way to distinguish topological spaces (e.g., a sphere from the surface of a donut). We then build our way up to more recent theories such as contact homology and embedded contact homology.

Background: A first course in linear algebra.

About the speaker: Ko Honda received his Ph.D. from Princeton University in 1997. He was a recipient of the 2009 Geometry Prize of the Mathematical Society of Japan, and was an invited speaker at the International Congress of Mathematicians in 2006. He is interested in low-dimensional topology, contact and symplectic geometry, and dynamical systems.

SNACKS IN MH331B AT 2:30 PM
TALK STARTS AT 3 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>