The World of Mathematics and Statistics

SWARTHMORE COLLEGE • DEPARTMENT OF MATHEMATICS AND STATISTICS • COLLOQUIUM SERIES 2020-2021

Kaori Kitao Lecture



Lisa Piccirillo

Clay Mathematics Institute Research Fellowships MIT Mathematics

Getting a handle on low-dimensional topology

Topologists study manifolds, which are spaces with are locally very simple, but globally perhaps complicated. In dimensions 3 and higher, manifolds can be hard to visualize, because they cannot be embedded in 3-dimensional space. I'll introduce a set of building blocks for manifolds, called handles, which will allow us to build some pretty cool, and rather non-trivial, manifolds. In particular, we'll talk about how to use handles to conceptualize 4-dimensional manifolds.

Tuesday, April 18 Science Center 101 Refreshments: 4:15PM, Lecture: 4:30PM