BI-CO MATHEMATICS COLLOQUIUM

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"Curves and Surfaces in Topology"

Monday, October 25, 2021
Virtual Talk at 4:00
Join together in Hilles 109

Link:
https://haverford.zoom.us/j/93081753057?pwd=b0ZTcVFEZE5NZFlzU1lsMEVNbWpPQT09

Password is 634949

Abstract:

Topology is a branch of mathematics primarily concerned with studying the shape of spaces. I will begin this talk by giving you a more detailed description of what topology is and how it differs from the more familiar subject of geometry. One of the fundamental goals in topology is determining when two objects are "topologically" the same or different. For example, a circle and an ellipse are geometrically different objects, but they are actually considered to be the same object by a topologist. For much of the talk, I will focus on a class of objects called surfaces. We will see that there is a rich theory of curves on surfaces, and that this theory can help us determine when two surfaces are topologically different.