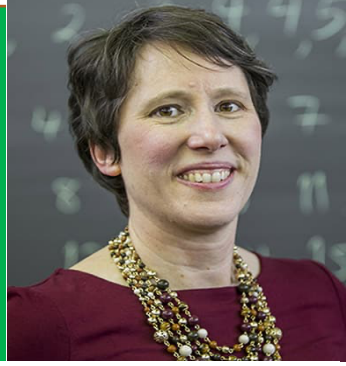
AWM DISTINGUISHED SPEAKER SERIES

University of Oregon



Tara Holm

Cornell University

presented by

The UO Student Chapter of the Association for Women in Mathematics

The AWM Speaker Series at the University of Oregon aims to increase the visibility of female researchers in the mathematical sciences and to provide a forum for the discussion of mathematics and its practice from a feminist viewpoint. The lectures started in fall 2013.

Association for Women in Mathematics

Understanding Symplectic Geometry through Polytopes and Lattice Points

Thursday, March 4, 2021

at 4 pm Pacific via Zoom

Topology is often called "rubber sheet geometry" and is described as "floppy" while geometry is more "rigid". Symplectic geometry, the natural geometry of classical mechanics, is floppier than Riemannian geometry but more rigid than topology. I will give an overview of this floppy/rigid spectrum. We will then explore how the geometry and topology of symmetries in this context relate to properties of polytopes, motivated by many pictures and examples. I will conclude with how some recent work, of my own and many others, comes to feature continued fractions, counting lattice points, and the Philadelphia subway system

Zoom Meeting ID 948 8325 7383

Passcode 201009