## Oklahoma State University

## **OSU-AWM**

## Title

Unknotting number and satellites

Speaker:Jennifer Hom, Georgia Institute of TechnologyDate:Feb 24, 2023Time:3:30 PMRoom:MSCS 101

**Abstract:** Abstract: The unknotting number of a knot is the minimum number of crossing changes needed to untie the knot. It is one of the simplest knot invariants to define, yet remains notoriously difficult to compute. We will survey some basic knot theory invariants and constructions, including the satellite knot construction, a straightforward way to build new families of knots. We will give a lower bound on the unknotting number of certain satellites using knot Floer homology. This is joint work with Tye Lidman and JungHwan Park.

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