



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Maggie Miller

Stanford Univ.

*Seifert surfaces in 3-
and 4-dimensional space*

WED MAR 08, 2023, MH320

Abstract: I will talk about knotted circles in 3-dimensional space, and show that every knot bounds a surface (known as a Seifert surface). We will see some interesting examples of knots that bound more than one Seifert surface that are very different from each other. Later on, I'll discuss how to visualize 4-dimensional space and show that while often Seifert surfaces become the same when an extra dimension is added, sometimes they don't. (Joint work with Kyle Hayden, Seungwon Kim, JungHwan Park, and Isaac Sundberg.)

Background: No particular background required.

About the speaker: Maggie Miller received her Ph.D. from Princeton University in 2020 and will be starting an assistant professorship at UT Austin in Fall 2023. She is currently a visitor at Stanford University. Her research area is in low-dimensional topology (e.g. knots).

SNACKS IN MACQUARRIE HALL 331B AT 2:40PM
TALK STARTS AT 3:00PM

For more information, see our full schedule at:

<http://www.timhsu.net/colloq/>