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

# Ethan Dlugie

**UC Berkeley**

*Wallpaper groups: a meeting place of algebra, geometry, and topology*

WED FEB 07, 2024, MH320

**Abstract:** Whether you're a tile artist in the Islamic Golden Age, a 1970's American home decorator, or an avid fan of thrift store clothing, you might be interested in the design and appeal of infinitely repeating planar patterns. There seems to be a dizzyingly infinite array of these patterns, so a mathematician might try to classify them according to their symmetries. In this colloquium, we'll see how an incredible mix of abstract algebra, geometry, and topology comes together to help you distinguish everything from your grandma's vintage wallpaper to your math department's bathroom floor tile.

*Background:* No background required.

**About the speaker:** Ethan Dlugie is a PhD student at UC Berkeley expecting to graduate this Spring 2024. He is a big fan of low dimensional topology, California native plants. and long distance train routes.

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/