



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



Edgar Bering

SJSU

*The Algebra and Geometry
of Symmetries*

WED SEP 14, 2022, MH320

Abstract: The symmetries of a geometric object (regular polygon, or something more elaborate) can be codified in an algebraic system known as a group. As an algebraic system, groups can arise in all sorts of ways that do not, at first glance, have any associated geometry, like the set of all shuffles of a deck of cards. However, there is always a road back, a way to construct a geometry out of a group. In this talk I will explore the consequences of this idea in some particular examples coming from low dimensional topology, leading up to a sketch of the frontier of research in the area.

Background: No particular background required; some exposure to linear algebra will be helpful.

About the speaker: Edgar A. Bering IV received his Ph. D. from the University of Illinois at Chicago, and is a newly hired assistant professor of mathematics at SJSU. His research interests span group theory and low dimensional topology.

SNACKS SERVED OUTSIDE BETWEEN MACQUARRIE HALL AND
SWEENEY HALL AT 2:30PM (WEATHER PERMITTING)
TALK STARTS AT 3:00PM

For more information, see our full schedule at:

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