

Department of Mathematics and Statistics

Colloquium Series



Juan Salinas University of Washington

Moduli Spaces in Geometry

Abstract: A moduli space is a "space" whose points parametrize a specific geometric phenomenon. In this presentation, we will delve into the concept of moduli spaces within geometry, focusing on illustrative examples. Our primary emphasis will be on parameterizing circles centered at the origin, lines containing the origin, and planar conics. We then explore how various geometric properties of these spaces, including dimensions, compactness, and smoothness, enable us to characterize and understand the underlying geometric phenomena in families of the relevant moduli problems.

Keywords: algebraic geometry, moduli spaces, projective space, moduli of conics, universal family.

Wednesday, Nov. 8, 1:05 - 1:50 pm in 4-2-314

CAL POLY POMONA