

## Departmental Colloquium

Professor John Nolan Department of Mathematics and Statistics American University, Washington DC February 21st, 2024, 3:00 PM, Knot Hall 309 Zoom link https://loyola.zoom.us/j/81524803402

> Meeting ID: 815 2480 3402 Passcode: mathstat

## Computing with and on shapes



## Abstract

How does one work with shapes inside a computer? Why would one want to work with shapes? We will explain why such questions come up in probability theory, and outline an approach to defining classes of geometric shapes. Then we will describe some computations we can do with such shapes - shifts and rotations, joining, intersecting. And then computations we can do on these shapes - integration, random sampling, and directional histograms.

The talk will be accessible to students.

RSVP: https://cglink.me/2hL/r2139536

Refreshments will be served. Contact: Dr.Sudeshna Basu, sbasu1@loyola.edu.