

Department of Mathematics and Statistics Colloquium

Computing with and on Shapes

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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 undergraduate students.

Monday, March 19 at 3:50 in Roop 103

Refreshments at 3:30