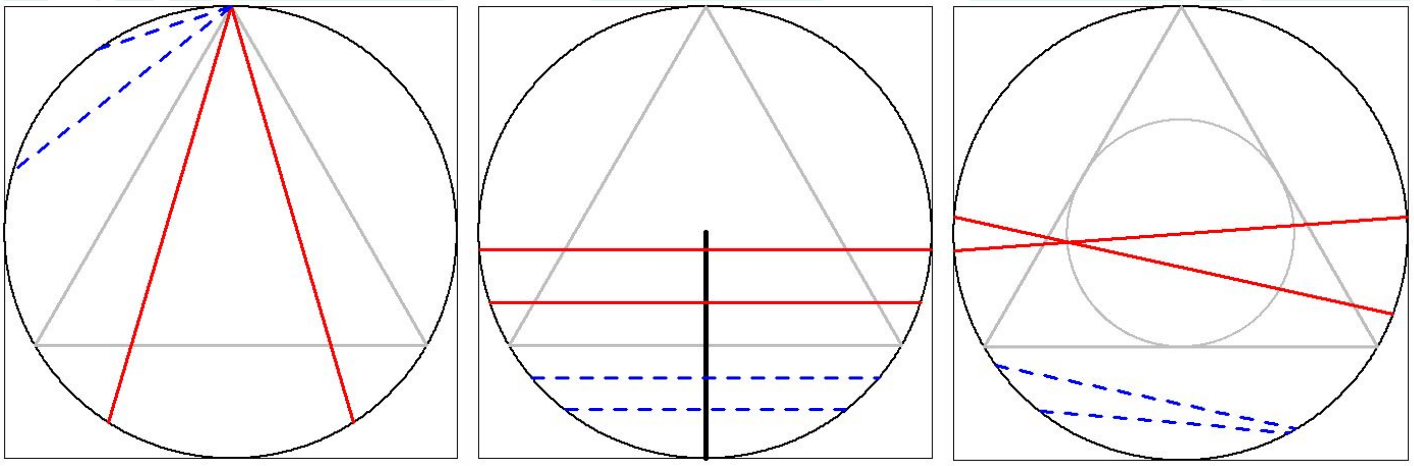
DEPARTMENT OF MATHEMATICS

Fall Colloquium Series

Bertrand's Paradox (i) from R simulation and (ii) from the Bayesian Perspective



Joseph Bertrand's own words: "We draw *at random* a chord onto a circle. What is the probability that it is longer than the side of the inscribed equilateral triangle?"

In the figures shown above, (solid) red chords:= longer than the triangle side; (dotted) blue chords := shorter than the triangle side.

Three different solutions to this famous problem were proposed by Bertrand, and the probabilities are (a) 1/3, (b) 1/2, and (c) 1/4.

In this talk, I will show how to simulate these problems and construct the figures using basic **R**, and how to find a Bayesian answer of 13/36. Hopefully, it's enjoyable by all.

Dr. Yoon G Kim, Humboldt State University

Dr. Kim is a Professor of Statistics at Humboldt State University where he has been teaching since 1992. He has a B.A. & M.S. in Computer Science & Statistics from Seoul National University, another M.S. in Statistics from Wright State University in Dayton, Ohio and his Ph.D. in Statistics (Response Surface Design) came from Virginia Tech. He enjoys teaching & thinking about both mathematical & applied statistics problems, and he likes to participate in various statistical computing problems.

Thursday, October 17, 2019 BSS Room 166, 4:00 PM

To view this poster online, go to https://math.humboldt.edu/get-involved/mathematics-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm on Thursday.