



PRESIDENTIAL DREAM COURSE
The UNIVERSITY of OKLAHOMA



MATH 4513 Capstone

The Mathematics of Data

Featuring: Dr. Cristopher Moore

530pm April 21, 2022

Physical Sciences Center, Room 201

Open to the public

Data, Algorithms, Justice and Fairness

Algorithms are being used to decide whether defendants will show up for court, whether they should be released on bail, and whether they will be good citizens if they are given parole. How accurate are these algorithms? What data are they based on? And how fair are they to different subgroups of the population?

Over the past few years, a controversy has erupted over the issue of algorithmic fairness – whether these algorithms treat some people differently than others. We will go through how these algorithms work, what they are based on, and how "fairness" and "accuracy" are slippery terms. Can decisions made by AI be explained to the humans affected by them? What recourse do we have if we disagree with them? Will algorithms help us move forward to a better future, or will they encode and enshrine the biases of the past?

Dr. Cristopher Moore

Dr. Moore is a resident professor at the Santa Fe Institute. He is an elected Fellow of the American Physical Society, the American Mathematical Society, and the American Association for the Advancement of Science.



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