

The Math/Stats Colloquium Department of Mathematics and Statistics San José State University



## Josephine Yu

## Georgia Tech (visiting MSRI) Solving polynomial equations OCTOBER 18, 2017, MH320

**Abstract:** Given a system of polynomial equations in multiple variables, how do we know if a solution exists? How do we find one solution? All solutions? I will discuss how combinatorics and tropical geometry can help us find answers and even improve numerical algorithms.

*Background:* The talk should be accessible to students with basic knowledge of linear algebra. Familiarity with abstract algebra and combinatorics is helpful but is not required.

**About the speaker:** Josephine Yu received her Ph.D. in mathematics from UC Berkeley and has taught at MIT. She is now an associate professor of mathematics at Georgia Tech. Her research is in combinatorics and algebraic geometry.

SNACKS IN MH331B AT 2:30 PM TALK STARTS AT 3:00 PM

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/