**DEPARTMENT OF MATHEMATICS MICHALIK LECTURE SERIES** 

## 3264 Conics in a Second

Two fundamental pillars of mathematics, algebra and geometry come together in the study of properties of geometric objects. For example, counting the number of intersections of two solids gives rise to a problem in algebra. Dr. Sturmfels works at this interface, both in developing theory and in using computer-based methods, and on applications that arise in an impressive variety of fields including statistics and computational biology. In this lecture, he illustrates these methods in the study of a famous 19th century problem, sometimes known as "Steiner's conic problem," on the tangency of conics. He also discusses applications to the statistical problem of maximum likelihood estimation, which relates to computing a solution that is most likely to fit given data.

The lecture and reception are free and open to the public.



Friday, February 28, 2020
University Club, Ballroom B

University Club, Ballroom B 3:30-4:30 p.m.

Reception immediately following lecture

## **Bernd Sturmfels**

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For more information, visit mathematics.pitt.edu.

