Title: P versus NP and connections to algebraic geometry, representation theory, and algebraic combinatorics

Professor Christian Ikenmeyer

Abstract:

The P versus NP conjecture is the most famous conjecture at the intersection of mathematics and theoretical computer science. Algebraic variants of the P vs NP conjecture are central problems in algebraic and geometric complexity theory. They have natural connections to algebraic geometry, representation theory, and algebraic combinatorics. In this talk I will outline some of these conjectures, approaches, and connections.