Caltech

Meromorphic functions and modern Abel-Jacobi theory

Abstract: A classical question in algebraic geometry is where can the poles and zeros of a meromorphic function occur on a Riemann surface C? A solution is given by the work of Abel and Jacobi in the 19th century in terms of the Jacobian of C. After a review of the classical theory, I will explain developments in the 21st century which explore the same question as C moves in moduli. The moduli theory opens a completely new perspective with connections in many new directions.



Tuesday, January 9 at 4pm Linde 310