MSRI–Evans Talk

Nov. 9   **Sam Payne**, Stanford University

Nonarchimedean algebraic geometry

The usual norm on the complex numbers and its associated analytic geometry (holomorphic functions and differential forms) have been fundamental tools for understanding the geometry and topology of complex algebraic varieties since the beginnings of the subject. Nonarchimedean norms, such as the p-adic norm on the rational numbers, also have an associated analytic geometry which has been used in number theory, but is just beginning to be applied in other areas of mathematics, such as algebraic geometry and dynamical systems. This talk will be an introduction to nonarchimedean geometry with an explanation of its combinatorial manifestation in tropical geometry and relations to intersection theory.