October 22

Alice Silverberg, Ohio State University, visiting UCB

Ranks of elliptic curves

Elliptic curves are basic to the study of number theory and arithmetical algebraic geometry. The points of an elliptic curve over the field of rational numbers form a finitely generated abelian group. There are a number of open problems about the ranks of these groups. In this talk we will give an introduction to elliptic curves and ranks, and will discuss some conjectures about ranks in families of elliptic curves.