

1154-11-1324 **Geoffrey Smith** and **Isabel Vogt***, Stanford University, Department of Mathematics, 450 Serra Mall, Building 380, Stanford, CA 94305. *Low degree points on curves.*

In this talk we will discuss an arithmetic analogue of the gonality of a curve over a number field: the smallest positive integer e such that the points of degree bounded by e are infinite. By work of Faltings, Harris–Silverman and Abramovich–Harris, it is well-understood when this invariant is 1, 2, or 3; by work of Debarre–Fahlaoui these criteria do not generalize to e at least 4. We will study this invariant using the auxiliary geometry of a surface containing the curve and devote particular attention to scenarios under which we can guarantee that this invariant is actually equal to the gonality. (Received September 14, 2019)