

1131-11-296

Dan Abramovich and **Anthony Várilly-Alvarado*** (av15@rice.edu), Department of Mathematics MS 136, Rice University, 6100 S. Main St., Houston, TX 77005. *Vojta's conjecture and uniform boundedness of full-level structures on abelian varieties over number fields.*

In 1977, Mazur proved that the torsion subgroup of an elliptic curve over \mathbb{Q} is, up to isomorphism, one of only 15 groups. Before Merel gave a qualitative generalization of this result to arbitrary number fields, it was known that variants of the *abc* conjecture would imply uniform boundedness of torsion on elliptic curves over number fields of bounded degree. In this talk, I will explain how, using Vojta's conjecture as a higher-dimensional generalization of the *abc* conjecture, one can deduce similar uniform boundedness statements for full-level structures on abelian varieties of fixed dimension over number fields. (Received July 17, 2017)