Algebra Seminar

Totaro's Question for Tori of Low Rank

Reed Sarney Emory University

Abstract: Let k be a field, let G/k be a smooth connected linear algebraic group, and let X be a G-torsor over k. Generalizing a question of Serre, Totaro asked if the existence of a zero-cycle on X of degree $d \ge 1$ implies the existence of closed étale point on X of degree dividing d. This question is entirely unexplored in the literature for algebraic tori. We settle Totaro's question affirmatively for algebraic tori of rank ≤ 2 .

Tuesday, April 19, 2016, 4:00 pm Mathematics and Science Center: W304

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY