N16 Colloquium

Rational points on varieties

Patrick Corn St. Mary's College of Maryland

Abstract: Solving Diophantine equations is a central question of number theory. In this talk we focus on several quite explicit examples of Diophantine equations having no nontrivial solutions, and explore various explanations of this phenomenon. In particular, we present some computational evidence that the Brauer-Manin obstruction is the only one for certain Del Pezzo surfaces, as well as an application of the Brauer-Manin obstruction to descent on genus-2 curves. (No prior knowledge of the definitions of the above terms will be assumed!)

Monday, March 16, 2009, 3:00 pm Mathematics and Science Center: W306

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY