Brauer-Manin obstruction to the Hasse principle with an emphasis on K3 surfaces

Evis leronymou

Department of Mathematics & Statistics, University of Cyprus

ieronymou.evis@ucy.ac.cy

ABSTRACT

"The theory of the Brauer-Manin obstruction was introduced by Manin in 1970 and is concerned with qualitative questions regarding the rational points on varieties over number fields, most notably the failure of the Hasse principle. In this talk we will give an overview of this theory, and present some results concerning the computation of the Brauer-Manin set for K3 surfaces.