

How many algebraic numbers are there?

Quentin Guignard
(IHES)

Northcott's theorem asserts the finiteness of the set of algebraic points of bounded height and degree on a projective space. I will survey known results on the cardinality of these finite sets, and I will explain how to combine Tate's thesis with the Harder-Narasimhan-Grayson-Stuhler theory of slopes in order to give new results on this problem. In particular, we will give an easy proof of Schanuel's theorem.