

Some Uniform Bounds for the Set of Preperiodic Points for Rational Functions

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I will present a joint work with S. Vishkautsan and S. Troncoso where we bound the cardinality of the set of K -preperiodic points of an endomorphism of the projective line, where everything is defined over a number field K . This bound depends only on the degree of the endomorphism, the degree of K and on the cardinality of the set of primes of good reduction. We will explain the notion of good reduction that we have used and explain why this notion has important arithmetic consequences.