

Seminari de Geometria Algebraica 2016-2017 (UB-UPC-UAB)

Divendres 21 d'octubre a les 15:00, aula T2 FM-UB

<http://www.ub.edu/sga/>

Curves of low genus and k -th power consecutive values of quadratic polynomials

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In 2000, Vojta solved the n -squares problem under the Bombieri-Lang conjecture, by explicitly finding all the curves of genus 0 or 1 on certain surfaces related to this problem.

In this talk I will sketch a refined version of the geometric method implicit in Vojta's work, and I will discuss applications of this method (under the Bombieri-Lang conjecture) to the problem of bounding the number of consecutive k -th power values of quadratic polynomials. For $k=2$, this confirms a speculation by E. Gonzalez-Jimenez and X. Xarles, and independently by J. Browkin and J. Brzezinski.
