On the Exponential Diophantine Equation $x^2 + D = y^n$: a brief survey

Horia Vîrgolici

Abstract

We give a survey on some important results on the exponential Diophantine equation $x^2 + D = y^n$.

Keywords: exponential Diophantine equation, Lebesgue-Nagell equation, generalized Ramanujan-Nagell equation

ACM/AMS Classification: 11D41, 11D61.