



Gastvortrag

Donnerstag, 23. März 2023
Uhrzeit: 16.00 Uhr
Seminarraum II

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Pillai's conjecture for polynomials

Abstract:

In this paper we study the polynomial version of Pillai's conjecture on the exponential Diophantine equation

$$p^n - q^m = f.$$

We prove that for any non-constant polynomial f there are only finitely many quadruples $(n, m, \deg(p), \deg(q))$ consisting of integers $n, m \geq 2$ and non-constant polynomials p, q such that Pillai's equation holds. Moreover, we will give some examples that there can still be infinitely many possibilities for the polynomials p, q .

Eingeladen von Clemens Fuchs