UNIVERSITÄT SALZBURG

Fachbereich Mathematik
Hellbrunnerstraße 34
5020 Salzburg

Gastvortrag

Montag, 19. August 2019
Uhrzeit: 13:00 Uhr
Seminarraum II

Mahadi Ddamulira
Institute of Analysis and Number Theory
Graz University of Technology

On the *x*-coordinates of Pell equations which are sums of two Padovan numbers

Abstract:

Let $\{P_n\}_{n\geq 0}$ be the sequence of Padovan numbers defined by $P_0 = 0$, $P_1 = 1 = P_2$ and $P_{n+3} = P_{n+1} + P_n$ for all $n \geq 0$. In this talk, we find all positive square-free integers d such that the Pell equation $x^2 - dy^2 = \pm 1$ has at least two positive integer solutions (x, y) and (x', y'), such that each of x, x' is a sum of two Padovan numbers.

Eingeladen von Volker Ziegler