Institut für Analysis und Zahlentheorie

Zahlentheoretisches Kolloquium

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HS A, Kopernikusgasse 24, 1. OG

The search for different $D(n)$ sets

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For an integer n, a set od m distinct nonzero integers $a_1, a_2, \ldots, a_m$ such that $a_i a_j + n$ is a perfect square for all $i < j$, is called a $D(n) - m$-tuple. In the last few years, we have improved many known results about such sets. In many cases, our investigation began with some examples, which were obtained by (sometimes extensive) computer search. In this talk, I will show how we found them. In the end I will mention how to improve results by computing on modern huge servers.

R. Tichy