

Exposé court

127 **Sums of proper divisors with missing digits**

Thompson, Lola (Universiteit Utrecht)

Let $s(n)$ denote the sum of proper divisors of an integer n . In 1992 Erdős, Granville, Pomerance, and Spiro (EGPS) conjectured that if \mathcal{A} is a set of integers with asymptotic density zero then $s^{-1}(\mathcal{A})$ also has asymptotic density zero. In this talk, we will discuss recent progress towards the EGPS conjecture. In particular, we show that the conjecture holds when \mathcal{A} is taken to be a set of integers with missing digits. This talk is based on joint work with Kübra Benli, Giulia Cesana, Cécile Dartyge, and Charlotte Dombrowsky.