

Kolokviální přednáška proběhne 12.10.2022 od 16:00 v posluchárně M1.

Péter Pál Pach

Title: The Alon-Jaeger-Tarsi conjecture via group ring identities

Abstract:

The Alon-Jaeger-Tarsi conjecture states that for any finite field F of size at least 4 and any nonsingular matrix A over F there exists a vector x such that neither x nor Ax has a 0 component. In this talk we discuss the proof of this result for primes larger than 61 and show some further applications of our method about coset covers and additive bases. (Joint work with János Nagy and István Tomon.)

Péter Pál Pach is an associate professor, head of the MTA-BME Lendület Arithmetic Combinatorics Research group supported by a Lendület (Momentum) grant, Department of Computer Science and Information Theory, Budapest University of Technology and Economics. His numerous influential papers appear in top journals like Annals of Mathematics, Advances in Mathematics, Journal of Number Theory, etc.