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Der Wissenschaftsfonds.



Institut f. Analysis und Computational Number Theory (Math. A)

Zahlentheoretisches Kolloquium

Freitag, 11. 12. 2015, 14:00 Uhr, s.t.

Seminarraum C 208, 2. Stock, Steyrergasse 30, TU Graz

Problems with packing periodicity

DR. WÖDEN KUSNER

(TU Graz)

When we think about packing problems, our intuition often leads us to believe that the solutions should exhibit some exceptional symmetry. I'll survey some interesting problems and examples dealing with packing and periodicity, particularly some that break more symmetry than you might think.

In this context, I'll also tell you about recent joint work on packings of a generic polygon in the plane: By introducing a useful topology on packings and describing the local optimality of a configuration among double lattices as a consequence of an algorithm of Mount, linear programming techniques can often certify the best double lattice packing as a local maximum for volume fraction among all packings.

P.Grabner