

1117-52-185

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Packings of equal disks in the plane are known to have density at most 0.906..., and it is known that this is never achieved in the square torus. (We provide our own proof in the appendix.) We find packings of disks in a square torus we conjecture to be the most dense for certain numbers of packing disks, using continued fractions to approximate one-third the square root of 3 and 3 minus the square root of 3. We also define a constant to measure the efficiency of a packing motivated by a related constant due to Markov for continued fractions, and we show, using the unique factorization of Gaussian integers, that there is an upper bound for the Markov constant for grid-like packings. (Received January 13, 2016)