PERIODIC GAUSSIAN MOATS

ELLEN GETHNER AND H. M. STARK

ABSTRACT. A question of Gordon, mistakenly attributed to Erdős, asks if one can start at the origin and walk from there to infinity on Gaussian primes in steps of bounded length. We conjecture that one can start anywhere and the answer is still no. We introduce the concept of periodic Gaussian moats to prove our conjecture for step sizes of $\sqrt{2}$ and 2.