

1145-11-596

Jayce Robert Getz* (jgetz@math.duke.edu). *Secondary terms in asymptotics for the number of zeros of quadratic forms over number fields.*

Let Q be a nondegenerate quadratic form on a vector space V of even dimension n over a number field F . Via the circle method or automorphic methods one can give an asymptotic formula for smoothed sums over the number of zeros of the quadratic form whose coordinates are of size at most X (properly interpreted). We refine these results to obtain a secondary term in the expansion. (Received September 11, 2018)