

1084-32-356

Bernard Shiffman*, shiffman@math.jhu.edu. *Level sets of random holomorphic sections.*

We discuss the distribution of values of the Euler characteristic of level sets of Gaussian random holomorphic sections of powers of a positive line bundle L over a compact Kähler manifold M . Our methods involve the off-diagonal scaling asymptotics of the Szegő kernels for the spaces $H^0(M, L^N)$ of holomorphic sections of L^N . We also apply these methods to the distribution of values of the sup-norms of random sections. (Received September 04, 2012)