

The volume of pseudoeffective line bundles

Tamás Darvas
University of Maryland, College Park, USA

Abstract

Let L be a line bundle with positive singular Hermitian metric he^{-u} , on an n -dimensional compact Kähler manifold X . Let h_k be the dimension of the space of global sections that are L^2 integrable with respect to the weight e^{-ku} . We show that the limit of h_k/k^n exists, and equals the non-pluripolar volume of the I -model potential associated to u . Joint work with Mingchen Xia.