

1153-53-219

Lihan Wang* (lihan.wang@uconn.edu). *Gradient estimate for harmonic functions on Kähler manifolds.*

We will discuss our recent study of harmonic functions on non-compact complete Kähler manifolds with Ricci curvature lower bounds. We obtain a sharp integral gradient estimate, which implies sharp upper bounds of eigenvalues and rigidity results of Kähler structure at infinity. The estimate is sharp means the equality holds in complex hyperbolic space. This talk is based on the joint work with Ovidiu Munteanu. (Received August 28, 2019)