1036-58-47

Lei Zhang* (leizhang@math.uab.edu), University of Alabama, 1300 University Boulevard, Birmingham, AL 35294-1170. An approximation theorem for prescribing Q-curvature equations on riemannian manifolds.

For a prescribing Q-curvature equation, the blow up phenomenon appears when the integral of the Q-curvature is equal to certain numbers. We present theorems to describe the asymptotic behavior of blow-up solutions near their blow-up points. This is a joint work with G. Weinstein. (Received December 24, 2007)