

1107-58-292

Xiangjin Xu* (xxu@math.binghamton.edu), Department of Mathematical Sciences, Binghamton University-SUNY, 4400 Vestal Parkway East, Binghamton, NY 13902. *Some problems related to the sharp Li-Yau type Harnack estimates on Riemannian Manifolds with Negative Curvature.*

In this talk, we first discuss some new Li-Yau type Harnack estimates for the heat equations on manifolds with $Ric(M) \geq -K$, $K \geq 0$. Then we discuss some problems on the sharp Li-Yau type Harnack estimates. (Received January 17, 2015)