

***HAMILTON-SOUPLET-ZHANG TYPE ESTIMATE UNDER
INTEGRAL RICCI CURVATURE CONDITION AND ITS
APPLICATION TO LI-YAU INEQUALITY***

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Time: Mon, Dec. 11th, 10:00-11:00

Venue: Room 106, Shanghai Center for Mathematical Sciences

Abstract: We first prove a Hamilton-Souplet-Zhang type gradient estimate for the heat equation on Riemannian manifolds satisfying certain integral Ricci curvature condition. Then as an application, by implanting the Hamilton-Souplet-Zhang type estimate in an argument of Qi S. Zhang, we show that certain integral Li-Yau inequality holds for the heat equation in this circumstance. This is a joint work with Xingyu Song, Ling Wu, and Qi S. Zhang.