



6th Symposium on Analysis and PDEs

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June 1, 4:30–4:55pm

Weighted L^p -Liouville Theorems for Hypoelliptic Partial Differential Operators on Lie Groups.

We show several weighted L^p -Liouville-type theorems for second order hypoelliptic partial differential operators on Lie groups in \mathbb{R}^N . We provide examples of operators to which our results apply (e.g. heat operators on Carnot groups and Kolmogorov-Fokker-Planck operators) and an application to the uniqueness for the Cauchy problem for the evolution operators $\mathcal{L} - \partial_t$. The results presented are obtained in collaboration with A. Bonfiglioli and E. Lanconelli.