

1067-58-1425 **Nathaniel Eldredge*** (neldredge@math.cornell.edu), 593 Malott Hall, Cornell University,
Ithaca, NY 14850. *Hypoelliptic heat kernel inequalities on H-type groups.*

We discuss heat kernel inequalities for the hypoelliptic sub-Laplacian on H-type nilpotent Lie groups, together with consequences such as Gross's logarithmic Sobolev inequality, and possible infinite-dimensional generalizations. (Received September 21, 2010)