

MALLIAVIN CALCULUS FOR STABLE PROCESSES ON HEISENBERG  
GROUP

Tomasz Byczkowski  
Piotr Graczyk

*Abstract:* Smoothness of symmetric stable semigroups and some related semigroups of measures on the Heisenberg group is studied using Malliavin calculus for jump processes. If the Lévy measure of a symmetric stable semigroup is  $\mathcal{C}^m$ , then the semigroup is  $\mathcal{C}^{2m-4}$ . If the Lévy measure of a truncated stable semigroup is  $\mathcal{C}^1$ , then the semigroup is  $\mathcal{C}^\infty$ .

**2000 AMS Mathematics Subject Classification:** Primary: -; Secondary: -;

**Key words and phrases:** -

THE FULL TEXT IS AVAILABLE [HERE](#)