L^1-Norm of Infinitely Divisible Random Vectors and Certain Stochastic Integrals

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Abstract

Equivalent upper and lower bounds for the L^1 norm of Hilbert space valued infinitely divisible random variables are obtained and used to find bounds for different types of stochastic integrals.

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Bibliography

1. De la Pena, V.H. and Gine, E. (1999), *Decoupling. From dependence to independence.* Springer-Verlag, New York. Math. Review 99k:60044
2. Dunford, N and Schwartz, J.T. (1958), *Linear Operators, Part I: General Theory.Decoupling.* Wiley, New York. Math. Review 90g:47001a
3. I.I. Gihman and A.V. Skorohod. (1975), *The theory of Stochastic Processes, Vol. 2.* Springer, Berlin. Math. Review 51:11656
4. Klass, M.J. (1980), *Precision bounds for the relative error in the approximation of E|S_n| and extensions.* Ann. Probab. 8, 350--367. Math. Review 82h:60097
5. Kwapien, S. and Woyczynski, W.A. (1992), *Random Series and Stochastic Integrals: Single and Multiple.* Birkh"auser, Boston. Math. Review 94k:60074
6. Marcus, M.B. and Rosinski, J. *Continuity of stochastic integrals with respect to infinitely divisible random measures.* 2000 (preprint) Math. Review number not available.
7. Parthasarathy, K.R. (1967), *Probability measures on metric spaces.* Academic Press, New York. Math. Review 37:2271