

the ideas above and those of Fraser ([2],[3], pp. 23–31), one can demonstrate the following result.

**THEOREM.** *If  $(X, \mathcal{S})$  is an arbitrary measurable space, then (I)  $\Omega_0(X)$ ,  $\Omega_1(X)$  and  $\Omega_2(X)$  are symmetrically complete for all  $n$ .*

*If, further,  $\lambda$  is a nonatomic,  $\sigma$ -finite measure on  $\mathcal{S}$  and  $\mathcal{G}$  is a semialgebra which generates  $\mathcal{S}$ , then, (II)  $\Omega(\mathcal{G}, \lambda)$ ,  $\Omega(\mathcal{S}, \lambda)$  and  $\Omega_3(\lambda)$  are symmetrically complete for all  $n$ .*

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## ON CENTERING INFINITELY DIVISIBLE PROCESSES<sup>1</sup>

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The concept of centering stochastic processes having independent increments, introduced by Lévy, is applied to processes having both stationary and independent increments. The main purpose of this note is to answer the question as to what centering functions preserve the stationarity of the increments.

In 1934, Lévy [1] proved that any stochastic process with independent increments may be transformed by subtraction of a sure function, called a centering function, into a process whose sample functions possess certain desirable smoothness properties. (cf. Lévy [2] and Doob [3]). It is clear that the transformed process, called the centered process, is also a process possessing independent increments. The purpose of this paper is to show that a process having stationary and independent increments may be centered in such a way so as to preserve the stationarity as well as the independence of the increments.

To be more precise, consider the following definitions (cf. Doob [3] p. 407).

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