

and for some $\alpha > 2$ and constant C_2

$$(3.12) \quad E |X_M(t) - EX_M(t)|^\alpha \leq C_2 \quad \text{for all } t.$$

For M large enough, (3.11) follows from (3.1), (3.10) and (3.5). By Minkowski's inequality, (3.12) follows from (3.2) and (2.4). The proof of the theorem is now completed.

4. A remark on applications. One use of the foregoing central limit theorem is to provide conditions, without any further ado, for the asymptotic normality of various estimates of the spectrum of a stationary time series that have been considered by us (see [4]).

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ON THE ENUMERATION OF DECISION PATTERNS INVOLVING n MEANS¹

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1. Introduction. The purpose of this paper is to provide a mathematical treatment for the enumeration of decision patterns obtained in the pairwise comparison of n sample means. In the comparison of n means, there are altogether $\binom{n}{2}$ pairwise comparisons, and each individual comparison between two means, say m_1 and m_2 , must result in the decision that m_1 is significantly less than m_2 , that m_2 is significantly less than m_1 , or that there is no significant difference. Symbolically, these three alternatives are written as $m_1 < m_2$, $m_2 < m_1$, and $m_1 \doteq m_2$, respectively.

There are, thus, altogether $3^{\binom{n}{2}}$ possible *decision sets* in the comparison of n objects, a *decision set* consisting of the $\binom{n}{2}$ pairwise comparisons. However, for the comparison of n means, there are fewer decision sets since circularities are automatically ruled out.

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