

SOME REMARKS ON THE CENTRAL LIMIT THEOREM FOR  
FUNCTIONALS OF LINEAR PROCESSES UNDER SHORT-RANGE  
DEPENDENCE

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*Abstract:* In this paper we consider the central limit theorems for functionals  $G : \mathbb{R}^m \rightarrow \mathbb{R}$  of one-sided  $m$ -dimensional linear processes  $X_t = \sum_{r=0}^{\infty} A_r Z_{t-r}$ , where  $A$  is a nonrandom matrix  $m \times m$  and  $Z_r$ 's are i.i.d. random vectors in  $\mathbb{R}^m$ .

**2000 AMS Mathematics Subject Classification:** Primary: 60F05; Secondary: 60G10.

**Key words and phrases:** Central limit theorem, linear process, time series, short-range dependence, Markov chain, martingale differences.

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