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Abstract

Title: Some deviation and moment inequalities for stationary sequences and random fields

We shall present some inequalities for the distribution function of partial sums of stationary sequences or random fields. Particular attention will be drawn on martingale differences sequences, the so-called orthomartingale random fields and Bernoulli random fields (functional of independent identically distributed random fields). The applications of these inequalities cover estimate of the convergence in the law of large numbers (Baum-Katz), Hölderian invariance principle and rates in the central limit theorem.