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**Magda Peligrad\*** ([irina8@yahoo.com](mailto:irina8@yahoo.com)), Department of Mathematical Sciences, University of Cincinnati, PO Box 210025, Cincinnati, OH 45221-0025, and **Sergey Utev**. *Moment and maximal inequalities for some classes of dependent variables*. Preliminary report.

We study classes of random variables that are  $r$ -associated (negatively or positively). The tools developed include estimation of moments of partial sums and maximal inequalities. They are used to obtain asymptotic results with both Gaussian and nongaussian limits. These results shed light on the asymptotic behavior of numerous examples such as exchangeable variables, certain Gaussian processes, empirical process, classes of Markov chains, determinantal process. They are also useful to study stochastic processes that are functionals of several independent processes mentioned above. (Received February 06, 2008)