Journal of
Mathematical
Inequalities
Volume 15, Number 2 (2021), 827–844
doi:10.7153/jmi-2021-15-58

MAXIMAL MOMENT INEQUALITY FOR PARTIAL SUMS OF ρ–MIXING SEQUENCES AND ITS APPLICATIONS

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Abstract. A maximal moment inequality for partial sums of ρ-mixing random variable sequences is established, which uses some moment summations as upper bound. As its applications, we discuss the strong law of large numbers for weighted sums and the Berry-Esseen bound of nonparametric regression estimate.

Mathematics subject classification (2020): 60E15, 60F15, 62G07.
Keywords and phrases: Maximal moment inequality, ρ-mixing, strong law of large numbers, weighted sums, Berry-Esseen bound.

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