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Maximal Moment Inequality for Partial Sums of Strong Mixing Sequences and Application

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摘要

关键词 strong mixing maximal moment inequality fixed design regression model weight function estimate asymptotic normality

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Maximal Moment Inequality for Partial Sums of Strong Mixing Sequences and Application

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Abstract Some maximal moment inequalities for partial sums of the strong mixing random variable sequence are established. These inequalities use moment sums as up-boundary and improve the corresponding ones obtained by Shao (1996). To show the application of the inequalities, we apply them to discuss the asymptotic normality of the weight function estimate for the fixed design regression model.

Key words strong mixing maximal moment inequality fixed design regression model weight function estimate asymptotic normality

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