

Regression estimation under strong mixing data

Huijun Guo¹ · Youming Liu¹

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Abstract This paper studies multivariate wavelet regression estimators with errors-in-variables under strong mixing data. We firstly prove the strong consistency for non-oscillating and Fourier-oscillating noises. Then, a convergence rate is provided for non-oscillating noises, when an estimated function has some smoothness. Finally, the consistency and convergence rate are discussed for a practical wavelet estimator.

Keywords Regression estimation · Errors-in-variables · Strong mixing · Practical estimator · Wavelets

✉ Youming Liu
liuym@bjut.edu.cn

Huijun Guo
guohuijun@emails.bjut.edu.cn

¹ Department of Applied Mathematics, Beijing University of Technology, Pingle Yuan 100, Beijing 100124, People's Republic of China