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MOMENT CONVERGENCE RATE OF ESTIMATORS IN PARTIALLY LINEAR MODELS UNDER AANA ERRORS

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Abstract. In this paper, we investigate the partially linear regression model based on asymptotically almost negatively associated (AANA) random variables. Under some weak conditions, some results of moment convergence and complete convergence are obtained for the parametric least squares estimator and nonparametric weighted estimator. Our results extend the corresponding ones for negatively associated (NA) errors to AANA errors. In addition, we discuss the selection of design points and weight functions. Last, some simulations are illustrated to show the performance of our results.

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Paper JMI-17-62

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