A TEST FOR INDEPENDENCE OF TWO STATIONARY INFINITE ORDER AUTOREGRESSIVE PROCESSES

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Abstract.   This paper considers the independence test for two stationary infinite order autoregressive processes. For a test, we follow the empirical process method and construct the Cramér-von Mises type test statistics based on the least squares residuals. It is shown that the proposed test statistics behave asymptotically the same as those based on true errors. Simulation results are provided for illustration.

Key words and phrases: Independence test, infinite order autoregressive processes, the Cramér-von Mises test, residual empirical process, weak convergence.