Testing for serial independence in vector autoregressive models

J.S. Allison; S.G. Meintanis and J. Ngatchou-Wandji

We consider tests for serial independence of arbitrary finite order for the innovations in vector autoregressive models. The tests are expressed as L2--type criteria involving the difference of the joint empirical characteristic function and the product of corresponding marginals. Asymptotic as well as Monte--Carlo results are presented.