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On a minimum distance estimate of the period in functional autoregressive processes

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Abstract :

We consider a continuous time random process with functional autoregressive representation. We state statistical results on a mean functional estimator determining a minimum distance estimator of the period giving consistency and a limit law stated in Mourid and Benyelles [13]. Then we discuss their performance on numerical simulations and on real data analyzing the cycle of a climatic phenomena.

Keywords

functional autoregressive process, functional mean estimation, period estimation, minimum distance estimation, functional data, simulation.

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