

Department of Decision Sciences

Statistics Seminars

Asymptotics for Spherical Functional Autoregressions

Domenico Marinucci

Università di Roma Tor Vergata

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12:00 pm Room AS01 Via Roentgen -1 Milano

[Zoom meeting](#)

Abstract

In this talk, we investigate a class of spherical functional autoregressive processes, and we discuss the estimation of the corresponding autoregressive kernels. In particular, we first establish a consistency result (in sup and mean-square norm), then a quantitative central limit theorem (in Wasserstein distance), and finally a weak convergence result, under more restrictive regularity conditions. We shall also hint at possible extensions, in particular nonparametric testing for stationarity, isotropy and Gaussianity.

Based on joint works with Alessia Caponera and Anna Vidotto.