GAUSSIAN SEMIPARAMETRIC ESTIMATION FOR RANDOM FIELDS WITH SINGULAR SPECTRUM

Domenico Marinucci

Abstract: We analyze the asymptotic behaviour of the tapered discrete Fourier transforms for random fields with singular spectrum. The results are used to establish consistency and asymptotic normality for semiparametric estimates of the singularity parameter under broad conditions.

2000 AMS Mathematics Subject Classification: 60G60, 62M15, 62G20.

Key words and phrases: Discrete Fourier transforms, random fields, singular spectrum, Whittle semiparametric estimates.

The full text is available HERE