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STATISTICAL INFERENCE FOR SPHERICAL FUNCTIONAL AUTOREGRESSIONS

A Hacking day at the Department of Mathematics

In recent years, time-varying spherical random fields are naturally becoming an important tool, especially for applications in Climate and Atmospheric Sciences, Cosmology and Astrophysics. Here, we focus on the class of spherical functional autoregressions, which can be interpreted as a functional extension to the sphere of the well-known real-valued autoregressive processes, and we discuss two estimation procedures for the corresponding autoregressive kernels. The former is based on a functional L2L2-minimisation criterion, the latter on its penalised version, leading to a LASSO-type estimator. We present some asymptotic results and concentration bounds. Then, we compare their performances through simulations.

INFORMATION:

<http://datascience.maths.unitn.it/events/sfa2020/index.html>

SCHEDULE

Friday 2020/06/26 10:00 - 12.00

DETAILS

- Venue: WEBINAR
- Language: English
- Admission: credentials will be sent to the participants the day before of the event
- How to apply: send an email to Claudio Agostinelli (claudio.agostinelli@unitn.it)



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