PIPGES · WEBINARS

JUN · 10 2022

02:00 PM

(GMT-03:00) Brasilia Standard Time - Sao Paulo

The video call link will be available at:

https://tiny.one/krainski-e

Interinstitutional Graduate Program in Statistics (PIPGES) of Federal University of São Carlos with University of São Paulo promotes seminars groups (temporarily webinars, due to pandemic issues) of researches involving Probability, Statistics, Machine Learning etc. Our interest, among other things, is to stimulate the sharing of knowledge, as well as the connection between members of the program and researchers in other institutions.

Organizer

Michel H. Montoril, Department of Statistics,
Federal University of São Carlos.

AN OVERVIEW OF THE STOCHASTIC PARTIAL DIFFERENTIAL EQUATIONS APPROACH FOR SPATIAL AND SPATIO-TEMPORAL MODELS

In this talk we will briefly introduce some work on the Stochastic Partial Differential Equations approach for building models for Gaussian Random Fields. We consider the link between the discrete and continuous domain models and how this framework can be used to build nonstationary and nonseparable spatio-temporal models. We will point how to implement this model class taking advantages of direct solvers for general sparse matrices so that the computation time does not increase much when comparing with stationary and separable models. An application will be shown as an illustration.

SPEAKER

Elias Krainski · KAUST

BIO

Elias did his PhD at the Norwegian University of Science and Technology in Trondheim, Norway. He was adjunct professor at the statistics department of the Universidade Federal do Parana until September 2019. He was a postdoctoral fellow at the Statistics department of the Dalhousie University in Halifax, Canada and is currently a postdoctoral fellow at the King Abdullah University of Science and Technology, working with the Bayesian Computation research group led by Professor Håvard Rue. His work is mainly on applying new models.

UFSCar **ICMC · USP**