

Séminaire de Probabilités et Statistiques

Mardi 17 octobre à 14h00

Laboratoire Dieudonné
Salle de réunion Fizeau (5e étage)

Rodrigo Cabral Farias

(I3S, Université Côte d'Azur)

*Coastal flooding risk estimation using simulation and
metamodeling*

In this talk an application of a Bayesian metamodeling approach for the evaluation of the probability of an excursion set of an expensive-to-evaluate function is presented. The specific application considered in this talk is the evaluation of coastal flooding risk using a complex simulator. First, a brief description of the coastal flooding problem and of the considered test case is given, then a Bayesian metamodeling approach is presented along with sequential strategies for efficient planning of the simulations. In the last part of the talk, results of the presented strategies are shown for the test case.