



UNIVERSIDAD TECNICA  
FEDERICO SANTA MARIA

DEPARTAMENTO  
DE MATEMÁTICA

## **Próximo Seminario DMAT**

**Martes 17 de Noviembre de 2020, 11:30 - 12:30**

MODALIDAD VIRTUAL VIA ZOOM

ID: 894 8071 0728

CÓDIGO: 830705

**PIER GIOVANNI BISSIRI**  
(UNIVERSITY OF BOLOGNA)

### **Positive definite functions on spheres: some statistical and mathematical issues**

Positive definite functions are a key mathematical tool in geostatistics. If the study region is geographically extensive, the space which needs to be considered is the spherical surface equipped with the geodesic distance. After reviewing some general results about positive definite functions on spheres, this talk will focus on Bayesian nonparametric models for spatial covariance functions for global data. Then, it will review main known results about strict positive definiteness on spheres in the isotropic case and will show a recent result about the axially symmetric case.