

Scholarship on the special topic

"Robust multivariate methods with applications to latent variable models for complex experimental and observational designs"

Project description

The project will start from the evaluation of real case studies, mainly from the engineering or the biomedical field, which will require the development of multivariate inferential methods within the nonparametric approach. The PhD candidate will work in an interdisciplinary group and will develop both theoretical methods and software code (mainly in R) to face complex application problems.

References: see <http://www.gest.unipd.it/~salmaso/>

Suggested references for the special topic exam

- Pesarin (2001) Multivariate Permutation Tests. Wiley (first 4 chapters),
- any basic textbook on latent variable modelling
- any introductory textbook on experimental design (for instance Montgomery, D.C., Design and Analysis of Experiments, Wiley)
- Rosenbaum, Observational Studies, Springer (first 2 chapters - basic ideas).