

Ph.D. in Data Analytics and Decision Science:

Thesis Defenses March 16th, 2022 Aula N. Schiavoni/online by Teams – at 15.30

Agostino Torti – XXXIV Cycle

Advisor: Prof. Piercesare Secchi

PhD Thesis Title: **Statistical Modelling of Mobility Data for Policy Design and Strategic Decision Making**

Abstract:

The aim of this PhD thesis is to develop novel methodologies to properly analyse, understand, model and predict mobility data in complex ecosystems, so to help decision makers in the planning and management of mobility infrastructures and services.

This thesis is two-fold: from a methodological point of view, some steps ahead in the analysis of complex data through tools from Functional Data Analysis and Network Theory have been done; from a practical point of view, different research questions coming from different realities in the mobility field (e.g., bike sharing systems, railway networks, road networks and subway systems) have been addressed, finding out different remarks and ways forward for the planning and management of mobility infrastructures and services.