## **Caterina Fenu**

GraphNet: a bridge between graphs theory and network analysis.

## Abstract

GraphNet is a project whose aim is to model, compute and estimate interesting quantities in networks and graph analysis. The nature of this study is the integration and development of mathematical, statistical and computer science tools to provide a thorough comprehension of the complex association between graph theory and network science. The primary project's aim is to bridge together the abstract mathematical structure of graphs and the computational and inferential approaches in the description of real-world networks arising from applications. In this talk we describe the main objective of this project: the theoretical aspects of graph structures, analysis of case studies, and implementation of appropriate computational and visualization tools.