Selection and Influence Mechanisms in Social Networks, PhD candidate Pau Vila Soler (RUG)

The project deals with selection and influence mechanisms in peer networks and, more specifically, he will be using Machine Learning (e.g. GNNs), Statistical Analysis, and Simulation-based models to try to understand how people influence and are influenced by the social network that they are embedded in as well as how these networks are formed to begin with.

This project is part of GUTS, an NWO Gravitation project: growinguptogetherinsociety.com. In a team with other GUTS researchers (based in Leiden and Amsterdam), prospective longitudinal network data, survey data, and neuroimaging data will be collected among young adults (e.g., a cohort of students at an applied university). The longitudinal network data will be the basis for the dissertation. Disentangling selection from influence requires stochastic actor-oriented modeling, implemented in SIENA, a program that models changes in the peer network (selection: similar individuals choosing each other to hang out with) and behavior (influence: connected individuals becoming increasingly similar) between time points. The first paper will be based on other data (e.g., the Swiss Student Life Survey).