

Daniele Manini is a Researcher (INF/01 Informatica) at the Computer Science Department of the University of Turin. He graduated in Computer Science and received the qualification of Ph.D. in Computer Science from the University of Turin. Daniele Manini focused his research activities on the development of analytical and simulative models used for describing and studying multi-domain systems. In particular, this activity has been addressed toward three fields: performance evaluation of communication networks, the analysis of biological systems by formal methods, and the development of models describing typical phenomena of complex Economic systems. The performance evaluation of communication networks includes the study of distributed applications, such as peer-to-peer and sensor networks, streaming applications, storage distribution systems, and LTE networks. This work has been performed by the exploitation of available tools, e.g. Petri Net and fluid models, and it has been also addressed to the analysis of other methodologies, such as the second order fluid behavior. The systems biology activity is focused on the use of informatics tools for studying problematic related to angiogenesis and tumor growth. In the economic field, the main goal is the research of new proposals useful to describe the diffusion of strategic and business models, and the regulation of financial assets. All these activities are converging in the development of a shared project that is leading to the implementation of a framework based on the Mean Field Analysis that allows to study (multi-domain) systems characterized by a large number of components.

Daniele Manini participated to national projects FIRB – PERF e PRIN – PATTERN, and in MASP project in the context of "Polo di Innovazione ICT". He is recently involved in the COST Action "Random Network Coding and Designs over GF(q)" (2012-16).