Abstract:
Type systems are widely used techniques for programming languages analysis. They are used to avoid undesired behaviors (run-time type errors), which are specific for each language. In this talk I will motivate the need for static analysis in problems related to security and privacy of data in distributed networks, and memory leaks in copyless message passing paradigm in presence of exceptions. Observed problems are formalized in process calculi and I will sketch how type systems can be used to avoid some undesired behaviors of networks and programs. The talk is based on the results presented in my thesis.

Host: Fabrizio Montesi