DESCRIPTION

The Department's research in this area covers a rich variety of topics, including: automated reasoning, computability, concurrency, cryptographic protocols, design and analysis of algorithms, equational logic and rewriting, graph algorithms, logic and verification, modal and temporal logics, pattern matching, probabilistic computation, program analysis, program semantics, proof theory, quantum computation theory, rewrite systems, string algorithms, verification by model checking.


PROJECTS (2012-2016)
  The project aims at making automated reasoning (a) applicable to a wider range of problems, and (b) easier to use by researchers, software developers, hardware designers, and information system users and developers. Main topics of interest are: standardization of expressive languages; decision procedures; transition system analysis, and high-level synthesis.
- SIRS: The project will develop a new representation for data collected through semantic tools, such as queries in SPARQL and OWL languages. Moreover, it will develop software for mobile and newer devices, for the presentation and navigation of such data (7/2015 - 7/2017).

SELECTED PUBLICATIONS (2012-2016)