

SEMINAR ANNOUNCEMENT

Monday 18 December 2017, Time:15.00-17.00

Laboratorio CINI ITeM – Edificio Centri Comuni @ Complesso Universitario Monte S. Angelo
Via Cinthia, 21 80126 NAPOLI



Prof. Angela Bonifati

Lyon 1 University, Lione, France,

LIRIS Research lab

<http://liris.cnrs.fr/angela.bonifati>

Graph Queries: Generation, Evaluation and Learning

Abstract: Several modern graph query languages are capable of expressing sophisticated graph queries, which return nodes connected by arbitrarily complex paths. Such paths can be synthesized by regular expressions and often involve recursion. Such graph queries are known as Regular Path Queries and correspond to Property Paths in Sparql 1.1. Recently, with my colleagues I have been investigating regular path queries and their combinations by looking at the generation problem, the complexity of query evaluation and the learning problem. In this talk, I will

begin with a brief recap of graph queries and their expressive power. I will then provide an overview of a comprehensive query-oriented graph benchmark that we have designed and assessed. I will next discuss the theoretical results of our study on the complexity of regular simple path queries. I will then present a learning framework for regular path queries and discuss its potential along with its practical feasibility. To conclude, I will briefly outline our ongoing work and pinpoint lingering issues and research directions in the study of graph queries.

Angela Bonifati received her Ph.D. degree in Computer Science from Politecnico di Milano in 2002. After graduating she worked at the INRIA research institute in Paris and returned to Italy in 2003, joining the Italian National Research Council. She is now a full Professor in France, currently at University Lyon 1. Her research focuses on advanced database applications such as data integration, structured and semi-structured information, web databases, studying both theoretical and system-oriented aspects. Angela served as the Program Chair of several international conferences, including ICDE 2011 and ICDE 2018 and WebDB 2013. She is associate editor of VLDB Journal and Distributed and Parallel Databases. She has received grants from the French and Italian Ministry of Science and the French National Research Council (CNRS).

Info: **Prof. Antonio Picariello** - tel. 081 7683826 – antonio.picariello@unina.it

