UNIVERSITÀ DELLA CALABRIA

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Summer lectures in Artificial Intelligence

Speaker: **Prof. Wolfgang Faber, University of Huddersfield, UK**

Title: **Answer Set Programming for Qualitative Spatio-temporal Reasoning**

Abstract: We study the translation of reasoning problems involving qualitative spatio-temporal calculi into answer set programming (ASP).
We present various alternative transformations and provide a qualitative comparison among them. An implementation of these transformations is provided by a tool that transforms problem instances specified in the language of the Generic Qualitative Reasoner (GQR) into ASP problems. Finally, we report on an experimental analysis of solving consistency problems for Allen's Interval Algebra and the Region Connection Calculus with eight base relations (RCC-8).

Short Biography: Wolfgang Faber serves as Professor of Artificial Intelligence at the University of Huddersfield (UK) and is on leave as Associate Professor from the University of Calabria (Italy). Earlier, he served as an Assistant Professor at the Vienna University of Technology, where he also obtained his PhD in 2002. From 2004 to 2006 he was on an APART grant of the Austrian Academy of Sciences. His general research interests are in knowledge representation, logic programming, nonmonotonic reasoning, planning, and knowledge-based agents. He has published more than 100 refereed articles in major journals, collections and conference proceedings in these areas. He is one of the architects of DLV, a state-of-the-art system for computing answer sets of disjunctive deductive databases, which is used all over the world. He has acted as a chair for several workshops and conferences, has been on the program committees of many of the major conferences of his research areas, and has served on the editorial board and as a reviewer for many journals and conferences on Artificial Intelligence, Knowledge Representation, and Logic Programming.

Date	Time	Room
June, 27, 2016	11:00	MT10-CUBO 30B