



UNIVERSITÀ DELLA CALABRIA

DIPARTIMENTO DI
MATEMATICA
E INFORMATICA

Avviso di Seminario

mercoledì 09 luglio alle ore 11:30

presso l'Aula MT10 - cubo 30B - I piano -

il prof. *Leonid Libkin*

University of Edinburgh

terrà un seminario dal titolo:

"Incomplete Data:

What Went Wrong, and How to Fix It"

ABSTRACT

Incomplete data is ubiquitous and poses even more problems than before. The more data we accumulate and the more widespread tools for integrating and exchanging data become, the more instances of incompleteness we have. And yet the subject is poorly handled by both practice and theory. Many queries for which students get full marks in their undergraduate courses will not work correctly in the presence of incomplete data, but these ways of evaluating queries are cast in stone (SQL standard). We have many theoretical results on handling incomplete data but they are, by and large, about showing high complexity bounds, and thus are often dismissed by practitioners. Even worse, we have a basic theoretical notion of what it means to answer queries over incomplete data, and yet this is not at all what practical systems do.

Is there a way out of this predicament? Can we have a theory of incompleteness that will appeal to theoreticians and make practitioners realize that commercial DBMSs often produce paradoxical answers? Can we make such a theory applicable, i.e., implementable on top of existing DBMSs that are very good at fast query evaluation? And can we make it useful for applications such as data integration and handling inconsistency? The talk is about raising these issues, providing some answers, and outlining problems that still need to be solved.

SHORT BIOGRAPHY

Leonid Libkin is Professor of Foundations of Data Management in the School of Informatics at the University of Edinburgh. He was previously professor at the University of Toronto and a member of research staff at Bell Laboratories. He received his PhD from the University of Pennsylvania in 1994. His main research interests are in the areas of data management and applications of logic in computer science. He has written five books and over 180 technical papers. He was the recipient of a Marie Curie Chair Award from the EU in 2006 and four best paper awards. He has chaired several program committees, including PODS and ICDT, and was the conference chair of the 2010 Federated Logic Conference. He is an ACM fellow and a fellow of the Royal Society of Edinburgh.

IL DIRETTORE DEL DIPARTIMENTO
(prof. Nicola LEONE)