

PODS 2015 General and Program Chairs’ Welcome Message

It is our great pleasure to welcome you to the 34th ACM SIGMOD-SIGACT-SIGAI Symposium on Principles of Database Systems (PODS 2015), held in Melbourne, Victoria, Australia, on May 31 – June 4, 2015, in conjunction with the 2015 ACM SIGMOD International Conference on Management of Data. Since the first edition of the symposium in 1982, the PODS papers are distinguished by a rigorous approach to widely diverse problems in data management, often bringing to bear techniques from a variety of different areas, including computational logic, finite model theory, computational complexity, algorithm design and analysis, programming languages, and artificial intelligence. The PODS Symposia study data management challenges in a variety of application contexts, including more recently probabilistic data, streaming data, graph data, information retrieval, ontology and semantic web, and data-driven processes and systems. PODS has a tradition of being the premier international conference on the theoretical and foundational aspects of data management, and the interested reader is referred to the PODS web pages at <http://www.sigmod.org/the-pods-pages/> for information on the history of this conference series.

This year’s symposium continues this tradition, but in addition the PODS Executive Committee decided to broaden the scope of PODS, and to explicitly invite for submission papers providing original, substantial contributions in one or more of the following categories:

- a) deep theoretical exploration of topical areas central to data management;
- b) new formal frameworks that aim at providing the basis for deeper theoretical investigation of important emerging issues in data management; and
- c) validation of theoretical approaches from the lens of practical applicability in data management.

This volume contains the proceedings of PODS 2015, which include an abstract for the keynote address by Michael I. Jordan (University of California, Berkeley), papers based on two invited tutorials by Todd J. Green (LogicBlox, USA) and Graham Cormode (University of Warwick, UK), and 25 contributions that were selected by the Program Committee for presentation at the symposium.

This year, PODS experimented for the first time with two submission cycles, where the first cycle allowed also for papers to be revised and resubmitted. For the first cycle, 29 papers were submitted, 4 of which were directly selected for inclusion in the proceedings, and 7 were invited for a resubmission after a revision. The quality of most of the revised papers increased substantially with respect to the first submission, and 6 of those in the end were selected for the proceedings. For the second cycle, 51 papers were submitted, 15 of which were selected, resulting in 25 papers selected overall from a total number of 80 submissions. Most of the 25 accepted papers are extended abstracts. While all submissions have been reviewed by at least four Program Committee members, they have not been formally refereed. It is expected that much of the research described in these papers will be published in a more polished and detailed form in scientific journals.

With respect to the three categories mentioned above, of the 80 submissions (resp., 25 accepted papers), 47 (resp., 19) were classified by the authors in category (a), 28 (resp., 5) in category (b), and only 6 (resp., 3) in category (c). The categories are non-exclusive, and classification was not mandatory; indeed, several papers were classified in more than one category, and for 13 (resp., 3) submissions, no category was specified.

An important task for the Program Committee has been the selection of the PODS 2015 Best Paper Award. The committee selected the paper

“Parallel-Correctness and Transferability for Conjunctive Queries”

by Tom J. Ameloot, Gaetano Geck, Bas Ketsman, Frank Neven and Thomas Schwentick

On behalf of the committee, we would like to extend our sincere congratulations to the authors. Since 2008, PODS assigns the ACM PODS Alberto O. Mendelzon Test-of-Time Award to a paper or a small number of papers published in the PODS proceedings ten years prior that had the most impact over the intervening decade. This year's committee, consisting of Dan Suciu (chair), Foto Afrati, and Frank Neven, selected the following two papers. Our warmest congratulations to their authors!

“XPath Satisfiability in the Presence of DTDs”

by Michael Benedikt, Wenfei Fan, and Floris Geerts

“Views and Queries: Determinacy and Rewriting”

by Luc Segoufin and Victor Vianu.

We thank all authors who submitted papers to the symposium. We would also like to thank all members of the Program Committee and all external referees for the enormous amount of work they have done. The two submission cycles, with the revision round for the first cycle, placed an extra burden on all of them. The program committee did not meet in person, but carried out extensive discussions during the electronic program committee meeting, relying on the EasyChair System.

We thank Maurizio Lenzerini and Richard Hull, the former two PODS General Chairs, for their unfailing support. Our thanks go also to the members of the PODS Executive Committee, who advised in the selection of the Program Committee, and who gave important advise on policy issues in all phases of the conference organization. We are particularly grateful to Martin Grohe, the previous PODS PC chair, for his help and advise. Special thanks go to Marco Montali, the Proceedings and Publicity Chair of PODS 2015, and to Wim Martens, for maintaining the PODS Web pages. We are also grateful to the SIGMOD 2015 General Chair, Timos Sellis, for his excellent coordination of the overall SIGMOD/PODS 2015 conference, and his collaboration and support in all the issues requiring coordination between SIGMOD and PODS. Finally, we thank all our sponsors, in particular the ACM Special Interest Groups on Management of Data, on Algorithms and Computation Theory, and on Artificial Intelligence, for their invaluable support.

Tova Milo

PODS 2015 General Chair

Diego Calvanese

PODS 2015 Program Chair