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Preface

The International Conference on Scientific and Statistical Database Management (SSDBM) is an established forum for the exchange of the latest research results on concepts, tools, and techniques for scientific database applications. The 2010 meeting marked the 22nd time that scientific domain experts, databases researchers, practitioners, and developers came together to share their insights and to discuss future research directions in a stimulating environment. The conference was held from June 30 to July 2 at Villa Bosch, near the Carl Bosch Museum and Heidelberg Castle, overlooking the picturesque Neckar Valley. The conference was organized at and co-sponsored by Heidelberg University and HITS, the Heidelberg Institute for Theoretical Studies, established in January 2010 by Dr. Klaus Tschira, co-founder of SAP AG, as a successor to the EML Research Institute. HITS focuses on new approaches and foundations towards interpreting the rapidly increasing amounts of experimental data. Heidelberg University, the oldest university in Germany, was founded in 1386, is a German Excellence University, and a top-ranking university in Europe and worldwide, known among other things for its excellence in the natural sciences and medicine. The university also hosts a unique Interdisciplinary Center for Scientific Computing (IWR) where grand challenges in the computational sciences are tackled, e.g., climate and ocean modeling, turbulent flows, combustion, bio-molecules, and drug design.

In 2010, SSDBM received a near-record number of 94 submissions from 27 countries. Each submission was reviewed by at least three of the 38 PC members or external reviewers. After careful consideration, 41 papers (≈44%) overall where accepted, 30 as long papers (≈32%) and 11 short papers and demonstrations. The reviewing process was managed by the EasyChair Conference System (www.easychair.org), an excellent free conference management system, developed by Andrei Voronkov. SSDBM 2010 featured two keynotes: Daniel Abadi from Yale University discussed "Trade-offs Between Parallel Database Systems, Hadoop, and HadoopDB as Platforms for Petabyte-Scale Analysis" and described experiences using existing parallel databases and MapReduce systems, and HadoopDB, a hybrid system under development at Yale. In his keynote, Roger Barga from Microsoft Research presented "Emerging Trends and Converging Technologies in Data-Intensive Scalable Computing."

The program and activities of SSDBM 2010 were the result of a large effort by the authors, reviewers, presenters, and organizers. We thank them all for helping to make this conference a success! In particular, we thank the General Chair, Andreas Reuter for offering to host SSDBM at Villa Bosch, for supporting SSDBM in general, and for organizing the SSDBM sponsors. We also thank Wolfgang Müller from HITS for the local organization and Conny Franke for compiling the proceedings. Last not least, we would like to thank the "father of SSDBM"

and Chair of the Steering Committee, Arie Shoshani, for guidance throughout the process of organzing SSDBM. We hope you enjoy the proceedings!

April 2010

Michael Gertz
Bertram Ludäscher

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