Special Issue on Algorithmic and Numerical Aspects of Web Search

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Special Issue editors

This volume of *Internet Mathematics* presents a selection of papers from the Workshop on Algorithmic and Numerical Aspects of Web Search (ANAW), held in Pisa, Italy, February 6–7, 2006. All contributions were carefully reviewed to meet the publication standards of this journal.

The World Wide Web is becoming part of everyday life, and the design of fast and efficient algorithms at its scale plays an enormous practical role. The main goal of the workshop was to bring together researchers from both Numerical Analysis and Computer Science who work on Web Search. The many challenging problems in this field indeed ask for a cooperative effort from both disciplines.

More than 20 scientific contributions on several aspects of the study of web graphs were presented at the workshop, which was attended by more than 80 participants. The presentations were complemented by a lively discussion raising interesting new problems and opportunities for further cooperation between the two scientific communities. The topics of the presentations included numerical aspects of link-based ranking algorithms, mathematical properties of large scale web graphs, algorithms for analyzing large scale web graphs and web information retrieval, and industrial aspects of web search. Invited talks were given by four distinguished lecturers: Ricardo Baeza-Yates (Yahoo!), Apostolos Gerasoulis (Ask.com), Gene H. Golub (Stanford University), and Gerhard Weikum (Max-Planck-Institut, Saarbrücken, Germany).

The papers collected in this special issue are representative of the very good research done today in this field by both numerical analysts and computer scientists.

We conclude with a special thanks to the authors and the reviewers of the submitted papers for their timely and careful work. We also would like to thank the sponsors of the workshop: Pisa University (Italy), National Institute

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