

Lecture Notes in Artificial Intelligence 4108

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Jonathan M. Borwein William M. Farmer (Eds.)

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Preface

This volume contains the proceedings of the 5th International Conference on Mathematical Knowledge Management (MKM 2006) held August 10-12, 2006 in Wokingham, UK. Previous international MKM conferences were at Hagenburg, Austria (September 2001), Bertinoro, Italy (February 2003), Białowieża, Poland (September 2004), and Bremen, Germany (July 2005).

Mathematical knowledge management (MKM) is an emerging interdisciplinary field of research in the intersection of mathematics, computer science, library science, and scientific publishing. Its main objective is to develop new and better ways of managing mathematical knowledge using sophisticated software tools. Two other important aims are to obtain a better understanding of the nature of mathematical knowledge and to investigate new modes of consuming and producing mathematical knowledge. The MKM conferences bring together mathematicians, software developers, users of mathematics, librarians, publishers, and educators who are interested in advancing the management of mathematical knowledge.

MKM 2006 received 22 submissions. Of these, 20 were reviewed by three Program Committee members or external reviewers and two were reviewed by two. The reviews were exceptionally positive, and as a result, the Program Committee decided to accept 20 papers for presentation at the conference and publication in this proceedings volume.

We would like to thank Gregory J. Chaitin and Abdou Youssef for agreeing to give invited talks at MKM 2006. This volume includes an abstract of Dr. Chaitin's talk and a full written version of Dr. Youssef's talk. We are also grateful to the Program Committee and the external reviewers for their review of the submissions and to the Conference Chairs, Andrew Adams and Paul Cairn, for taking care of the local arrangements. We used the EasyChair conference management system, developed by Andrei Voronkov, to facilitate the paper submission, the review process, and the preparation of the proceedings. EasyChair performed beautifully and saved us a huge amount of time.

June 2006

Jonathan M. Borwein
William M. Farmer

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