

Preface

This volume collects the papers accepted for presentation at the 10th IMA Conference on the Mathematics of Surfaces, held at the University of Leeds, UK, September 15–17, 2003. As with all earlier conferences in the series, contributors to this volume come from a wide variety of countries in Asia, Europe and North America. The papers presented here reflect the continued relevance of the subject, and, by comparison with the contents of earlier volumes in the series, the changing nature of application areas and mathematical techniques. To give the casual browser of these proceedings an idea of the diversity of the subject area, the papers in the present volume cover such topics and techniques as digital geometry processing, computer graphics, surface topology, medical applications, subdivision surfaces, surface reconstruction, surface triangulation, watermarking, data compression, data smoothing, human-computer interaction, extracting shape from shading, surface height recovery, reverse engineering, box-splines, the Plateau Problem, splines (a variety of papers), transfinite blending, and affine arithmetic. There is also a paper in memory of the late Prof. Josef Hoschek of the Technische Universität Darmstadt, co-authored by a former research student, Prof. Bert Jüttler, on the subject of using line congruences for parameterizing special algebraic surfaces.

We would like to thank all those who attended the conference and helped to make it a success. In particular we thank those who contributed to these proceedings. We are particularly grateful to Lucy Nye (at the Institute of Mathematics and Its Applications) for help in making arrangements, and to Alfred Hofmann and Christine Günther of Springer-Verlag for their help in publishing this volume. Following this preface is a list of distinguished researchers who expended much effort in refereeing the papers for this proceedings. Due to their work, many of the papers were considerably improved. Our thanks go to all of them and particularly to our fellow member of the Organizing Committee, Malcolm Sabin.

June 2003

Mike Wilson
Ralph Martin
Editors of these Proceedings

Organization

The Mathematics of Surfaces X was organized by the Institute of Mathematics and Its Applications (Catherine Richards House, 16 Nelson St., Southend-on-Sea, Essex, SS1 1EF, UK), and the University of Leeds, UK.

Organizing Committee

Ralph Martin (Cardiff University, UK)
Malcolm Sabin (Numerical Geometry Ltd., UK)
Michael Wilson (University of Leeds, UK)

Program Committee

C. Armstrong (Queen's University Belfast, UK)
N. Dyn (Tel Aviv University, Israel)
R. Farouki (University of California, Davis, USA)
A. Fitzgibbon (University of Oxford, UK)
M. Floater (Sintef, Norway)
D. Gossard (MIT, USA)
H. Hagen (University of Kaiserslautern, Germany)
M.-S. Kim (Seoul National University, Korea)
F. Kimura (University of Tokyo, Japan)
D. Kriegman (University of Illinois, USA)
T. Lyche (University of Oslo, Norway)
D. Manocha (University of North Carolina, USA)
R. Martin (Cardiff University, UK)
N. Patrikalakis (MIT, USA)
H. Pottmann (Technical University of Vienna, Austria)
M. Pratt (LMR Systems, UK)
M. Sabin (Numerical Geometry, UK)
K. Sugihara (University of Tokyo, Japan)
C. Taylor (Manchester University, UK)
M. Wilson (University of Leeds, UK)
W. Wang (Hong Kong University, China)

Mathematics of Surfaces

10th IMA International Conference, Leeds, UK,

September 15-17, 2003, Proceedings

Wilson, M.J.; Martin, R.R. (Eds.)

2003, VIII, 400 p., Softcover

ISBN: 978-3-540-20053-6