

Preface

This volume contains the proceedings of *MADIF 10*, the tenth Swedish Mathematics Education Research Seminar, held in Karlstad, January 26–27, 2016. The theme for this seminar was *ICT in mathematics education: the future and the realities*. The MADIF seminars are organised by the Swedish Society for Research in Mathematics Education (SMDF). MADIF aims to enhance the opportunities for discussion of research and exchange of perspectives, amongst junior researchers and between junior and senior researchers in the field. The first seminar took place in January 1999 at Lärarhögskolan in Stockholm and included the constitution of the SMDF. The second meeting was held in Göteborg in January 2000, the third in Norrköping in January 2002, the fourth and fifth in Malmö in January 2004 and 2006, respectively, and the sixth and seventh in Stockholm in January 2008 and 2010, respectively. MADIF 8 and MADIF 9 were held in Umeå. Printed proceedings of the seminars are available for all but the very first meeting. This volume and the proceedings from MADIF 9 are also available in digital form and work is being done to make previous version digitally available.

The members of the MADIF 10 programme committee were Johan Häggström (University of Gothenburg, chair), Eva Norén (Stockholm University), Jorryt van Bommel (Karlstad University), Judy Sayers (Stockholm University), Ola Helenius, (NCM, University of Gothenburg) and Yvonne Liljekvist (Karlstad University and Uppsala University). The local organisers were Jorryt van Bommel and Arne Engström (Karlstad University).

The programme of MADIF 10 included two plenary lectures by invited speakers, Kenneth Ruthven and Kaye Stacey. As before, MADIF works with a format of full 10 page papers and with short presentations. This year the number of full papers were nine and the short presentations numbered 15. New for this meeting was the symposia format, where three papers around a common theme were presented and discussed. Three symposia were organised this first time. As the research seminars have sustained the idea of offering formats for presentation that enhance feedback and exchange, the paper presentations are organised as discussion sessions based on points raised by an invited reactor. The organising committee would like to express its thanks to the following colleagues for their commitment to the task of being reactors and moderators: Cecilia Kilhamn, Johan Prytz, Anna Wernberg, Thomas Lingefjärd, Anette Jahnke, Olov Viirman, Arne Engström, Anette Bagger, Judy Sayers, Jesper Boesen, Johan Häggström and Ewa Bergqvist.

This volume comprises summaries of the two plenary addresses, nine research reports (papers), three symposia and abstracts for the 15 short presentations. In a rigorous two-step review process for presentation and publication, all papers were peer-reviewed by two or three researchers. Short presentation contributions were reviewed by members of the programme committee. Since 2010, the MADIF Proceedings have been designated scientific level 1 in the Norwegian list of authorised publication channels available at <http://dbh.nsd.uib.no/kanaler/>.

The editors are grateful to the following colleagues for providing reviews: Allan Tarp, Anna Pansell, Anna-Lena Ekdahl, Anne Birgitte Fyhn, Astrid Pettersson, Birgit Gustafsson, Cecilia Kilhamn, Christina Bauck Jensen, Constantinos Xenofontos, Djamshid Farahani, Frida Wetterstrand, Frode Rønning, Hanna Palmér, Inge Henningsen, Jannika Lindvall, Jenny Tegnefur, Kicki Skog, Kirsti Hemmi, Laura Desimone, Liv-Sissel Grønmo, Madeleine Löwing, Marcus Sundhäll, Maria Bjerneby Häll, Maria Fahlgren, Maria Larsson, Mats Brunström, Morten Blomhøj, Niclas Larson, Olov Viirman, Paul Andrews, Per Nilsson, Petra Svensson Källberg, Robert Gunnarsson, Sofia Öhman, Steve Lerman, Thomas Lingefjärd and Tomas Bergqvist.

The organising committee and the editors would like to express their gratitude to the organisers of *Matematikbiennalen 2016* for financially supporting the seminar. Finally we would like to thank all participants of MADIF 10 for sustaining their engagement in an intense scholarly activity during the seminar with its tight timetable, and for contributing to an open, positive and friendly atmosphere.

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