The International Community of Teachers of Mathematical Modelling and Applications (ICTMA) invites you to participate in the 14th International Conference on the Teaching of Mathematical Modelling and Applications (ICTMA14).

The conference will take place at the University of Hamburg in Germany and is scheduled from Monday, 27th July to Friday, 31st July 2009.

Invited are experts in the field as well as young researchers interested in research on the teaching of applications and modelling in all areas of mathematics education - primary through secondary schools, as well as colleges and universities.

Location:
The conference will take place at the central campus of the University of Hamburg, Faculty of Education (Von-Melle-Park). The main campus is situated close the Lake Alster in the heart of Hamburg.

Organising Committee:
Professor Gabriele Kaiser (Chair, University of Hamburg, Department of Education)
Dr. Rita Borromeo Ferri (Co-chair, University of Hamburg, Department of Education)
Working group on Mathematics Education at the University of Hamburg, Department of Education
Outline of the Conference Programme

Aim of the conference
The aim of the conference is to provide a forum for the presentation and exchange of information, experiences, and ideas relating to the teaching, learning and assessment of mathematical modelling, mathematical models and applications of mathematics at primary, secondary and tertiary level.

Themes of presentations and discussions
• Pedagogical issues, such as the understanding of modelling, promotion of modelling competencies, cognitive aspects;
• Assessment of modelling activities in school and universities;
• Connections to industrial or commercial practice, mathematics at the workplace;
• Influences of technology;
• Cross-cultural aspects and international studies

Conference activities
The conference programme will include
• Plenary lectures followed by reactions of invited experts in the field
• Paper presentations by conference participants in parallel sessions
• Panel discussion by invited experts on modelling perspectives around the world

Plenary lectures and reacting experts:
Werner Blum (University of Kassel, Germany)
Can Modelling be Taught and Learnt? Some Answers from Empirical Research.
Discussant: Marcelo de Carvalho Borba (State University of Sao Paulo at Rio Claro, Brazil)

Gloria Stillman (Melbourne University, Australia)
Applying Metacognitive Knowledge and Strategies in Applications and Mathematical Modelling Tasks at Secondary School
Discussant: Rita Borromeo Ferri (University of Hamburg, Germany)

Helmut Neunzert (Fraunhofer-Institut fuer Techno- und Wirtschaftsmathematik (ITWM), Kaiserslautern, Germany)
Mathematical Modelling and a New Role for Mathematics as Key Technology
Discussant: Jens Struckmeier (University of Hamburg, Germany) (subject to confirmation)

Chris Haines (City University, Great Britain)
Drivers for Mathematical Modelling: Pragmatism in Practice
Discussant: Katja Maaß (Educational University Freiburg, Germany)

Richard Lesh (Indiana University, USA), Helen Doerr (Syracuse University, USA)
Models and Modelling: Perspectives on Teaching and Learning Mathematics for the 21st Century; Chair: Mogens Niss (Roskilde Universitetscenter, Denmark)
Panel discussion:
Theme: Modelling perspectives around the world – State-of-the-art

Contributions by:
- Toshikazu Ikeda (Yokohama National University, Japan)
- Peter Galbraith (University of Queensland, Australia)
- Jonei Cerqueira Barbosa (State University of Feira de Santana, Brazil)
- Pauline Vos (University of Amsterdam, Netherlands)
- Bharath Sriraman (University of Montana, USA)
- Morten Blomhøj (Roskilde Universitetscenter, Denmark)
- George Ecol (Uganda/Canada)

Chair: Gabriele Kaiser (University of Hamburg, Germany)

Social programme and accommodation
There will be a strong social programme, which will include a welcome reception and welcome gathering, conference dinner, and excursion to the harbour.
Participants can also arrange pre- and post-conference tours to Germany’s new capital Berlin.
A great variety of hotels and cheaper accommodation are within walking distance and can be found on the website of the conference. There will be pre-bookings in recommended hotels with special rates.

Conference fee
The conference fee will be 350€ with a possible reduction for young researchers to 300€.
The conference fee will include a hardcopy of the conference proceedings, conference dinner, conference excursion, snacks and lunch.
We require abstracts of proposed papers with the following format:

a. A maximum of **one page**

b. Written in English using MS Word, Times, 14-point font, 16-point line space, and 6 points between paragraphs; occupying a frame of 170 by 247 mm.

c. The title should be centred (in 16 point bold capitals), author(s) name(s) (in 14 point bold), and affiliation(s) of author(s) (in 14 point italics) in this order; all in Times New Roman.

d. The name of the presenting author(s) should be underlined.

The abstracts shall be submitted via the conference website **www.ictma14.de** or **www.ictma2009.de**

**Conference proceedings**

An accepted publishing house will publish an edited volume of selected papers from ICTMA14 as a book for which purposes an established international panel will referee papers submitted by conference participants after the conference (to be received by 15th September 2009).

**Conference secretary and conference website:**  **www.ictma14.de** or  **www.ictma2009.de**

For further information (e.g., personal invitation letter) please contact the conference secretary Karen Stadtlander (University of Hamburg, Department of Education)  
ictma@erzwiss.uni-hamburg.de  or visit the website of the conference, which will be updated regularly.

**The city and transport**

The “Freie und Hansestadt Hamburg”, Germany’s second biggest metropolis (1.8 million inhabitants), is a bustling, cosmopolitan port city. Hamburg is situated between the North Sea and the Baltic Sea and easily reachable by its internationally connected airport or fast train connections. The Lake Alster together with the Elbe river, numerous canals and parks adjoining them, have made Hamburg well-known as “green” metropolis at the water's edge.
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<thead>
<tr>
<th>Time</th>
<th>Sunday 26-7-09</th>
<th>Monday 27-7-09</th>
<th>Tuesday 28-7-09</th>
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<tr>
<td>9.00-10.15</td>
<td>Opening ceremony (9.00-10.00)</td>
<td>Plenary lecture Stillman; Discussant Borromeo Ferri</td>
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<td>10.30-11.15</td>
<td>Plenary lecture Blum Discussant Borba (10.00-11.15)</td>
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<td>11.15-11.45</td>
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<td>Parallel sessions 4</td>
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<td>Parallel sessions 6</td>
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<td>9.00-10.15</td>
<td>Plenary lecture Neunzert; Discussant Struckmeier</td>
<td>Plenary lecture Haines Discussant Maass</td>
<td>Plenary lecture Doerr, Lesh, Niss</td>
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<td>10.30-11.15</td>
<td>Parallel sessions 14</td>
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<td>11.45-12.30</td>
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<td>Parallel sessions 18</td>
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<td>Parallel sessions 19</td>
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<td>16.15-17.00</td>
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<td>19.00-</td>
<td>Boat tour : harbour/container terminals</td>
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About ICTMA

The International Community of Teachers of Mathematical Modelling and Applications (ICTMA) consists of researchers and teachers interested in the teaching and learning of modelling and applications in mathematics at the primary, secondary, and tertiary levels as well as in professional and workplace environments. ICTMA is one of the five affiliated study groups of the International Commission on Mathematics Instruction (ICMI) and became a member in 2004.

The International Executive Committee of ICTMA is led by Professor Gabriele Kaiser (Germany), President. The other members of the international executive committee are: Professor Christopher Haines (UK), Professor Thomas Lingefjärd (Sweden), Professor Toshikazu Ikeda (Japan), Dr. Gloria Stillman (Australia), Professor Jonei Barbosa (Brazil), Professor Katja Maaß (Germany), Professor Jinxing Xie (China), Professor Richard Lesh (USA), Professor Bhadra Man Tuladhar (Nepal).

ICTMA emerged from the community of scholars and researchers supporting the International Conferences on the Teaching of Mathematical Modelling and Applications which has been concerned with research, teaching and practice of mathematical modelling since 1983. The aim of the group is to foster the teaching and researching of the teaching and learning of mathematical modelling and the ability to apply mathematics to genuine real world problems in primary, secondary, and tertiary educational environments including teacher education, together with professional and workplace environments. A distinctive aspect of ICTMA is the interface it provides for collaboration between those whose main activity lies in applying mathematics or in the fields of applications of mathematics, but who have an informed interest in educational issues, and those whose principal affiliations are within education, who have a commitment to promoting the effective application of mathematics to problems outside mathematics.

Full ICTMA conferences have been held biennially since 1983. The work of ICTMA is published in its dedicated series of books by Horwood Publishing, as well as in various journals.

**ICTMA International Conferences:**

1983 ICTMA1 University of Exeter, England
1985 ICTMA2 University of Exeter, England
1987 ICTMA3 University of Kassel, Germany
1989 ICTMA4 Roskilde University, Denmark
1991 ICTMA5 Freudenthal Institute, Netherlands
1993 ICTMA6 University of Delaware, USA
1995 ICTMA7 University of Ulster, North Ireland
1997 ICTMA8 University of Queensland, Australia
1999 ICTMA9 University of Lisbon, Portugal
2001 ICTMA10 Tsinghua University, China
2003 ICTMA11 Marquette University, USA
2005 ICTMA12 City University London, England
2007 ICTMA13 Indiana University, USA
2009 ICTMA14 University of Hamburg, Germany
2011 ICTMA15 University of Melbourne/Australian Catholic University, Australia

For details on the study group see http://www.ictma.net