

# MACAS-2017

## Revised Conference Programme

### June 26 - Monday

19:00 Claus Michelsen will be meeting all of you for an informal meeting and dinner at your own expense at

**Toldboden**

Nordre Toldbod

1259 Copenhagen K

Phone: +45 33930760

Email: [havnespiseriet@toldboden.com](mailto:havnespiseriet@toldboden.com)

Web: [www.toldboden.com](http://www.toldboden.com)

### June 27 - Tuesday

D170 08:30 Registration of participants with coffee/tea and informal networking

D174 09:30 Official opening

10:00 **Keynote 1:** Paul Ernest: *Mathematics, beauty and art*

C001 11:00 **Session 1:** *Mathematics, music and literature*

Hans Peter Nutzinger: *The beauty of patterns – The hidden mathematics of music*

Uffe Thomas Jankvist, Helle Rørbech & Jesper Bremholm: *Revisiting Hardy's "Apology" – An interdisciplinary rendezvous between mathematics, literature and literacy*

Lina Medina Ibarra, Avenilde Romo-Vázquez & Mario Sánchez Aguilar:

*Relating mathematics and literature as a teaching strategy at the high school level*

12:30-13:25 Lunch

- C001 13:30 **Session 2: Mathematics, primary education and beliefs**  
 Maria Kirstine Østergaard: *Contributing to students' perception of the relevance and application of mathematics by focusing on students' mathematics-related beliefs*  
 Lena Lindenskov: *Seven keys to experiencing aesthetic aspects of mathematics – exemplified in a Danish early intervention programme for high and low performers*  
 Gao Shuzhu & Chen Weiwei: *From centroid to explain a question about the volume of cone.*
- C001 15:00 Refreshments: water, fruit
- C001 15:30 **Session 3: Mathematics, creativity and giftedness**  
 Lisser Rye Ejersbo: *How is the Danish requirement that mathematics be a creative subject realised in practice?*  
 Peter Weng & Uffe Thomas Jankvist: *More gifted than gifted – Mathematical communication competency as an indicator for giftedness*
- C001 17:00 Departure for Guided tour at the DPU, AU, Campus Emdrup, by Nicolai Paulsen  
 D170
- 18:00-20:00 Reception with winetasting and tapas

## June 28 - Wednesday

- D174 09:30 **Keynote 2:** Jens Højgaard Jensen: *Mathematical modelling – Hiding or guiding?*
- D174 10:30 **Session 4: Mathematics, modelling and mathematization**  
 Martin Niss: *Addressing mathematization obstacles with unformalized problems in physics education*
- D174 11:00 Refreshments: coffee/tea
- D174 11:30 **Session 5: Mathematics, language and technology**  
 Caitlin Furlong: *Technology-based games in mathematics and their impact on student motivation*  
 Daria Yeryomka: *The mathematical and physical principles of modern art expertise technology*
- 12:30-13:25 Lunch

- C001 13:30 **Session 6: Mathematics and interdisciplinary teaching**  
 Simon Zell: *Models for interdisciplinary teaching*  
 Claus Michelsen: *Secondary mathematics and biology in-service teachers engaging in interdisciplinary unit planning: Challenges, limitations and potentials*
- 14:30 Getting ready for the cruise boat
- 15:00 Departure with the bus in front of C001  
 Excursion and conference dinner (separate programme will follow)  
 The Viking Bus will drive us to Toldboden
- 15:30-17:30 Guided Cruise boat for a two hours guided tour in the harbor of Copenhagen
- 17:30-19:00 Walk & talk with visit to Christianshavn & Christania
- 19:00 Dinner at SpiseLoppen inside Christania  
 Restaurant Spiseloppen  
 Bådsmandstræde 43  
 DK-1407 København K  
 T: +45 32 57 95 58

## June 29 - Thursday

- D174 10:00 **Keynote 3:** Annie Savard: *Making decisions in a complex world: Teaching how to navigate using mathematics*
- D174 11:00 Refreshments: coffee/tea
- C001 11:30 **Session 7: Mathematics, literature and aesthetics.**  
 I.V. Golovacheva, A.F. Stroev, M.Ye. Zhuravlev & P.V. de Mauny: *An invitation to mathematical modelling of artistic space in literary criticism: Masochism reconsidered.*  
 Hans Walser: *Semi-regular figures: Between beauty and regularity.*
- 12:30 Lunch

- C001 13:30 **Session 8: Mathematics, STEM, STEAM, competencies and interdisciplinarity**  
Kirsten Spahn & Anette Nielsen: *Teaching in Science, Technology, Engineering and Mathematics. Case: Transportation of malaria medicine through environments with different temperatures.*  
Viktor Freiman, Manon LeBlanc & Caitlin Furlong: *STEAMing soft skills in makerspaces: What are the mathematical connections?*  
Tomas Højgaard & Jan Sølberg: *Competencies, curricula and interdisciplinarity: An analysis of a curriculum development process in mathematics and science education*
- C001 15:30 Closing reception