

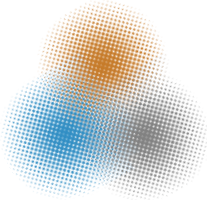
# MPM 2017

10 – 13 January 2017, Delft, The Netherlands

## How to register and submit contributions

Authors are invited to submit their contributions on any of the conference topics. Submissions and conference registration can only be performed via the conference website:

<http://www.mpm2017.eu>



Contact:

**MPM Research Community**  
Conference Secretariat MPM 2017

c/o Deltares

P.O. Box 177, 2600 MH Delft, The Netherlands  
Boussinesqweg 1, 2629 HV Delft, The Netherlands  
[info@mpm2017.eu](mailto:info@mpm2017.eu)



## Location

The conference will take place at Deltares located in Delft, The Netherlands. Deltares is an independent institute for applied research in the field of water and subsurface with main focus on deltas, coastal regions and river basins. Delft is located in the Western part of the Netherlands, within easy access of one of Europe's largest airports Amsterdam Schiphol.

Delft is internationally renowned as the city of Delft Blue, the House of Orange and Johannes Vermeer. A city of great charm with the best Holland has to offer. Delft has a characteristic historical town centre with exceptional gables, intimate canals, bridges and narrow alleys.



## MPM Research Community



# MPM 2017

## 1<sup>st</sup> International Conference on the Material Point Method for Modelling Large Deformation and Soil–Water–Structure Interaction

10 – 13 January 2017, Delft, The Netherlands



[www.mpm2017.eu](http://www.mpm2017.eu)

## Objectives

We are delighted to invite you to join us at the First International Conference on the Material Point Method for “Modelling Large Deformation and Soil–Water–Structure Interaction” organised by the MPM Research Community in January 2017 in Delft. This is the first conference following a series of international workshops and symposia previously held in Barcelona (2015), Cambridge (2014) and Delft (2013) in the context of the FP7 Marie-Curie project MPM-DREDGE.

The aim of the conference is to provide an international forum for presenting and discussing the latest developments in both the fundamental basis and the applicability of state-of-the-art computational methods that can be effectively used for solving a variety of large deformation problems in geotechnical and hydraulic engineering. Special focus is on the numerical modelling of interaction between soils, water and structures where the interface and transition between solid and fluid behaviour plays an essential role.

Papers on any aspect of these subjects are most welcome. Active discussion on key topics will be facilitated through invited keynote lectures. In addition, the partners of the MPM-DREDGE project will present the highlights of their research programme, achieved through intense collaboration between industry and academia.

## Important Dates

<b>14 February 2016</b>	Submission of abstracts
<b>29 February 2016</b>	Notification of accepted abstracts
<b>5 June 2016</b>	Submission of full paper
<b>2 September 2016</b>	Notification of review results
<b>3 October 2016</b>	Submission of final paper Deadline for early payment
<b>24 October 2016</b>	Notification of final acceptance
<b>10-13 January 2017</b>	Conference days

## Conference Topics

Papers should be related but are not limited to the main theme of the conference: **Numerical modelling of large deformation and soil–water–structure interaction**. They can be of either computational or experimental nature and can be of both fundamental basis or applications with a special emphasis on the following aspects:

- Material point method, formulation and applications
- Other numerical methods for modelling large deformations in geomechanics and fluid mechanics, amongst many others e.g. SPH, DEM/LBM, PFEM, ALE, UL-FEM, CFD
- Coupling of geomechanics and fluid mechanics concepts
- Constitutive models for large deformation, dynamic problems, cyclic loading, unsaturated behaviour
- Soil–water interaction and transition, modelling of sedimentation and erosion, sediment transport and deposition, coastal erosion and scouring
- Modelling of water–soil boundary layers under currents and waves, turbulence modelling

### Experiments, benchmarks and case studies:

- Experimental investigation of large deformation problems at field, model or laboratory scale
- Forensic engineering: (back-)analysis of large deformation failure events and natural hazards
- Case studies and benchmark solutions for large deformation problems

### Applications in geotechnical and hydraulic engineering:

- Slope liquefaction and breaching, dredging processes, jetting, cutting
- Installation of geocontainers, stability of breakwaters, wave attack on structures
- Submarine slides, turbulent flow slides
- Landslides (weather-, earthquake-, man-induced), debris flows, avalanches
- Dike stability (e.g. macrostability, piping, erosion) and dike reinforcement
- Installation problems, e.g. pile installation
- Soil investigation, e.g. pile load testing, CPT simulation, pore pressure dissemination testing
- Impact and stability problems, e.g. boreholes, sinkholes

## Local Organising Committee

- Alexander Rohe
- Kenichi Soga
- Hans Teunissen
- Bruno Zuada Coelho
- Joost Breedevelde
- Sjoerd Krab
- Edith Valies
- Ellen te Riele

## Scientific Committee

- Kenichi Soga (University of Cambridge, UK)
- Dongfang Liang (University of Cambridge, UK)
- Hans Teunissen (Deltares, Netherlands)
- Eduardo Alonso (Univ. Politècnica de Catalunya, Spain)
- Jürgen Grabe (Techn. Univ. Hamburg-Harburg, Germany)
- Paolo Simonini (Università degli Studi di Padova, Italy)
- Wim Uijtewaal (Delft Univ. of Technology, Netherlands)

## Preliminary Registration Fees

Registration fees are expressed in Euro. Early registration applicable if paid before 3 October 2016.

Delegates	500 € (regular)	400 € (early)
Reduced fee <sup>(*)</sup>	300 € (regular)	250 € (early)
Students	250 € (regular)	200 € (early)

Conference dinner (Wednesday, 11 January 2017): 50 €  
Technical excursion (Friday, 13 January 2017): 50 €  
Training course (Friday, 13 January 2017): 75 €  
Accompanying persons (incl. conference dinner): 100 €

<sup>(\*)</sup> reduced rates apply for members of the MPM Research Community

## MPM-DREDGE Project

MPM-DREDGE is an Industry-Academia Partnerships and Pathways (IAPP) project funded from the Seventh Framework Programme (FP7/2007-2013) of the European Commission during 2013 – 2017 under Grant Agreement PIAP-GA-2012-324522.

