



## Smoothed Particle Hydrodynamics European Research Interest Group

### Summary of the Steering Committee Meeting

8 December, 2016

University of Manchester

#### SC members present:

Ben Rogers, University of Manchester, UK (chair)  
Nathan Quinlan, NUI Galway, Ireland (secretary)  
Alex Crespo, Universidad de Vigo, Spain (webmaster)  
Xiangyu Hu, TU Munich, Germany  
David Le Touzé, Ecole Centrale de Nantes, France  
Jean-Christophe Marongiu, Andritz Hydro, France  
Renato Vacondio, Università di Parma, Italy  
Matthieu De Lefte, Nextflow, France  
Rade Vignjevic, Brunel University, UK

#### Also present:

Peter Stansby, University of Manchester, UK  
Steven Lind, University of Manchester, UK

### Specific Issues

#### 1 Update on ERCOFTAC

B. Rogers attended Autumn Festival. Secured €2000 for 2017 Workshop. ERCOFTAC encourages SPHERIC members to become ERCOFTAC members. SPHERIC is recognised as the most active SIG.

#### 2 Membership

B. Rogers reported approximately 8 new members since June 2016.

#### 3 Membership of Steering Committee (SC)

**Decision:** the SC will limit membership to 15, and try to expand industry participation. The currently open 15<sup>th</sup> place will be reserved for an industry representative. As vacancies arise, SC will seek new members by invitation or an open call. SPHERIC members may apply to join SC at any time – information is available on the website. **Action:** A. Crespo will ensure information is prominent.

#### 4 IUTAM Membership for ERCOFTAC

B. Rogers has applied for SPHERIC affiliation to IUTAM, as agreed in June 2016. Application requires some further administrative work – **Action:** B. Rogers will progress.

#### 5 Special journal Issues

P. Stansby has edited a special issue on Particle Methods for Flow Modelling in Ocean Engineering with 9 papers in the journal Ocean Engineering and Marine Energy. **Action:** A. Crespo to create a webpage highlighting special journal issues.

## 6 Grand Challenges and Joe Monaghan Prize

**Decision:** Next JM Prize will be announced in Ourense 2017 and awarded in Galway 2018. **Action:** N. Quinlan will administer. 5-year eligibility period as before.

**Decision:** GCs 1 and 2 to be combined into a new GC: Convergence, consistency and stability – J Monaghan, D. Violeau, R. Vignjevic and X. Hu will coordinate

**Decision:** 2 new GCs will be initiated. D Le Touzé will coordinate GC on coupling to other methods, and JC Marongiu will ask M Neuheuser to join him. M De Leffe, JC Marongiu will coordinate GC on applicability to industry.

## 7 Reflections on Munich Workshop

Comments by SC members, and relayed from other SPHERIC members, were discussed.

**Decision:** As proposed by A. Souto (not present), authors to select sessions at abstract submission time (organiser has final say).

**Decision:** Designate half-day for industrial applications.

**Decision:** Stay with 13-minute talks.

## 8 Ourense workshop

Discussion panel 1: Do we want SPH to be a fully Lagrangian method (for fluids)?

- chair: Antonio Souto (not present; to confirm)
- panel: R Vignjevic, S Lind, X Hu, D Le Touzé

Second panel discussion will be on real-life applications, following 2 application sessions.

**Decision:** Add Peter Eberhard, M.B. Liu, Mehmet Yildiz to scientific committee.

A. Crespo will distribute duty list to chairs.

A. Crespo will draft list of chairs from scientific committee, circulate to SC for comment and suggestions

Training day will consist of:

- DualSPHysics with GUI
- Introductory talk by Ben Rogers

Will pay for a new ISBN number.

**Decision:** As usual, proceedings will not be published.

2-part SC meeting as usual – end of training day

## 9 Asia workshop

B. Rogers reported from MB Liu – has applied for government approval for conference to take place in Sept or Oct 2017. Will take place in PKU conference centre. **Action:** B. Rogers will contact MB Liu about training day, and find out if practical session is possible.

## 10 Newsletter

The following will contribute articles:

- Alex – workshop announcement
- MB Liu – Asia workshop announcement
- D Violeau – GPUSPH
- B Rogers – dualSPHysics workshop
- D Le Touzé – has already provided one
- N Quinlan – recent literature update

3-4 more items needed. B. Rogers will email 8 new members to seek articles.

## 11 Bibliography

N Quinlan is extracting references from SCOPUS to add to citeulike – now up to 2000.

## 12 Website

A. Crespo reports benchmark #12 (wave/floating body) is online.

R. Vacondio proposes new 3D dambreak test case with experimental data for force on obstacle and water depth field.