



Smoothed Particle Hydrodynamics European Research Interest Group

Summary of the Steering Committee Meeting

6 November, 2008

INSEAN, Roma, Italy

SC members present:

Damien Violeau, EDF R&D (chair)

Nathan Quinlan, NUI Galway, Ireland (secretary)

Ben Rogers, University of Manchester, UK (webmaster)

Stefano Sibilla, Università di Pavia, Italy

Jean-Christophe Marongiu, Andritz VA Tech Hydro, Switzerland

Andrea Colagrossi, INSEAN, Italy

John Biddiscombe, CSCS, Switzerland

David Le Touzé, Ecole Centrale de Nantes, France

Also present:

Tatiana Capone, INSEAN, Italy

1 Membership of SPHERIC and the Steering Committee (SC)

D. Violeau reported that SPHERIC now has 63 members. 6 (including two industrial members) have joined since the workshop in Lausanne.

Since Andrea Panizzo has moved to Enel, La Sapienza steps down from the SC.

Università di Pavia, represented by Stefano Sibilla, joins the SC.

J.-C. Marongiu takes the place of E. Parkinson as the representative of Andritz VA TECH HYDRO on the SC.

2 General Features

2.1 SPHERIC Bibliography

N. Quinlan reported that there are now 520 references in the SPHERIC group database on www.citeulike.org. He will write a short article on CiteULike for the next newsletter, and a list of recent SPH publications for each future newsletter.

B. Rogers will place links to online Ph.D. theses on the SPHERIC website. D. Violeau will email members to ask them to forward details of theses.

2.2 Benchmark test cases

It was decided to retain all of the current benchmarks, and that the number should be increased if possible (since benchmarks are not restricted to dedicated sessions at the annual workshop). The template document (available on the SPH website) should be used by benchmark authors, and SPH results should be kept distinct from the benchmark specification (though of course the specification may refer to SPH results). N. Quinlan will update the template to reflect this.

B. Rogers is working with Dr. Valentin Heller of ETH Zürich, who is preparing a benchmark based on model landslide experiments, and will also prepare a hydrofoil problem based on the work of Duncan. N. Quinlan will submit a compressible flow test case. David Le Touzé will prepare wave-field and wedge-entry problems. P.

Groenenboom has proposed 3 benchmark problems. Andrea Colagrossi will obtain experimental data for a sloshing problem.

3 Nantes workshop

David Le Touzé described organisation of the 4th SPHERIC Workshop, to take place in Ecole Centrale Nantes from 27-29 May 2009, with a training day on 26 May. The keynote speakers, Profs. Cleary, Benz and Vignjevic, have accepted invitations from D. Violeau. The format will be similar to the 2008 workshop, with 39 regular presentations. Short (4-minute) oral presentations for poster presenters will be introduced as a new feature. Important dates are 13 February for abstract submission (one page, with authors requested to include one image and some results or validation), 13 March for notification to authors and 24 April for full papers (on the same template used in 2008). Payment will be by bank transfer. Announcements will be sent on ERCOFTAC, Coastal Engineering and Italian hydraulic research mailing lists, and if possible via IAHR. The first announcement will be in November, with a second in February. The Libersky prize will be presented for the best contribution by a student.

The training day will consist of two sessions. The first is aimed at new SPH researchers, and is in three parts, to be organised by D. Le Touzé (Introduction to SPH), N. Quinlan (with A. Colagrossi and D. Le Touzé, on accuracy and interpolation) and B. Rogers (hands-on illustrative examples in SPHysics). The afternoon will deal with p-meshless, organised by J. Biddiscombe. Software and datasets will be made available in advance and at the event, and participants will be asked to bring their own laptop. The fee for the training day will be an additional €50.

4 Communication

4.1 Website

B. Rogers reported that the SPHERIC mailing list has been closed down due to underuse. Ph.D. thesis links will be placed online. More visualizations (still and video) are required for the website.

4.2 Newsletter

Contributions should be ready by end of November. D. Le Touzé will contribute an article on the 2009 workshop and N. Quinlan will prepare short articles on Citeulike and a list of recent publications.

4.3 Next IAHR Biennial Congress

D. Violeau and Alexandre Tartakovsky will organise one or two special sessions on SPH at the August 2009 IAHR Congress in Vancouver. The deadline for abstracts is 31 December 2008.

4.4 Special Issue of the Journal of Hydraulic Research

A special issue of JHR is in preparation, with guest editors Moncho Gómez-Gesteira, J. M. Grassia, D. Violeau and B. Rogers. 12 authors have agreed to submit papers for review.

4.5 SPHERIC poster

D. Violeau will update the SPHERIC poster with new graphics.