



## **Smoothed Particle Hydrodynamics European Research Interest Group**

# Minutes of the Steering Committee Meeting 20 November, 2015

## **Paris**

#### SC members present:

Ben Rogers (Univ. Manchester, UK, chair)
Damien Violeau (EDF R&D, France, newsletter editor)
Xiangyu Hu (Technical Univ. of Munich, Germany)
Antonio Souto-Iglesias (Univ. Politecnica de Madrid, Spain)

#### Also present:

Renato Vacondio (Univ. of Parma, Italy)

Phone call

Nathan Quinlan (Nat. Univ. Ireland, Galway, Ireland, secretary) Thomas Rung (Technical Univ. of Hamburg Harburg, Germany)

Paul Groenenboom (ESI BV, Netherlands)

### Apologies:

Rade Vignjevic (Brunel Univ., UK)
Jean-Christophe Marongiu (Andritz Hydro, Switzerland)
Andrea Colagrossi (CNR-INSEAN, Italy)
Alex Crespo (Univ.of Vigo, Spain, webmaster)
Stefano Sibilla (Univ. of Pavia, Italy)
David Le Touzé (Ecole Centrale de Nantes, France)

# Specific issues

## **ERCOFTAC**

B. Rogers could not attend the last October meeting but will attend the next spring meeting. B. Rogers should apply as soon as possible to get funding for the next workshop. He will also contact B.J. Geurts to ask if he can come to the Munich workshop and present ERCOFTAC.

## Scientific Committee

B.Rogers will approach M. Yildiz, A. Tartakowsky, F. Spreng and M. Liu.

## **Transparency of SPHERIC Committee discussion**

W. Dehnen asked for more democracy in SPHERIC (in particular about the membership of the SC). It is suggested to send the minutes of the SC meeting to the members, to explain how they can get members of the SC. B. Rogers will prepare a short survey about SPHERIC governance for the next workshop and will talk about SC membership in Munich, insisting on the conditions to fulfill. This will be added by A.J.C. Crespo on the website in a 'governance' section. The chair should continue being chosen by the SC members, who are aware of how SPHERIC works. B. Rogers will email W. Dehnen to see whether he has some further suggestions.

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#### SC membership

P. Groenenboom is retiring soon. The SC thanks him for his active membership since the beginning of SPHERIC. R. Vacondio submitted a request to be member of the SC. B. Rogers will send a message to the SC members.

#### Journal special issues

B. Rogers underlines that these are good opportunity to publish SPH papers rapidly. 2010 JHR's special issue was successful (lots of citations). X. Hu will contact the J. Comput. Phys. about a possible special issue on SPHERIC Grand Challenges.

Two special issues are being prepared: 1) 'Particle Methods for Flow Modeling in Ocean Engineering': under the control of P.K. Stansby and Q. Ma (submission is almost closed); 2) 'Smoothed Particle Hydrodynamics for Novel Energy Efficient Hardware': T. Rung is part of it and would appreciate that the SC supports this project.

## **Grand Challenges & Joe Monaghan prize**

N. Quinlan said to B. Rogers that he was satisfied with the 2015 J.J. Monaghan prize, except that all nominations came from the SC. A. Souto Iglesias suggests inviting the winner to present his paper in Munich: the 'Monaghan prize lecture', 30' invited talk at the beginning of the first Discussion panel, free registration).

The next J.J. Monaghan prize should be awarded in 2018 (nominations open in 2017), to be confirmed at the next SC meeting.

Grand Ghallenges: short reviews have been done online except on Convergence. X. Hu accepted to take care of this. J.J. Monaghan and D. Price, who were in charge of this, will be removed (B. Rogers will contact them to explain).

#### Miscellaneous

- B. Rogers will ask D. Le Touzé to send the list of SPHERIC members. He received 4 membership applications.
- R. Vacondio has prepared a check list for workshop organization.

## **Munich 2016 Workshop**

Budget: the fees will be set according to the Parma workshop. The budget will depend on the number of attendees (X. Hu anticipated 90 and 120 delegates). As usual, the total budget is close to 40 k€. VAT issues remain to fix.

Venues are booked for the welcome cocktail, conference, lunches, banquet. Visit of the wind tunnel is to be planned.

The workshop format is globally unchanged. The students said that they don't dare asking questions or making comments during the discussion panels. It is suggested to let them discussing together during a dedicated session, but it looks difficult to organize with the existing agenda. We propose to ask the past Libersky prize winners to chair sessions, in order to have a mix between experienced and young participants. However, only experienced fellows will chair the Discussion panels.

Discussion panels: the first one will be dedicated to the topic of the 2015 J.J. Monaghan prize winning paper (see above). The second one will be on industrial application and SPH method for computer graphics.

Abstract selection process: some complained about the former process (Paris and Parma workshops). A meeting of the Scientific Committee to be organized in Munich. The chair and past chair of the SC should be involved in the process of choosing the reviewers.

Training day speakers & format: The format unchanged. NanoFluidX proposes to provide a speaker to present their code, and can provide sponsoring for the workshop. The SC finds it interesting for the afternoon if they propose to give a significant amount of money, otherwise we go back to the usual SPHysics session. The morning speakers may be T. Dalrymple and W. Dehnen (X. Hu will contact them).

Invited speakers: Prof. Liu (Beijing), Dr D. Fedosov (Jülish, Germany).

The proceedings will be provided on USB sticks.

Student prize: NVidia will give GPU cards.

The two workshop SC meetings will take place at 5 o'clock, on Monday and Wednesday afternoon.

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### Vigo 2017 workshop

A.J.C. Crespo says that everything is going ahead, in particular the venues. Travelling instructions will be provided. Everything should be in place by the time of the Munich workshop. A.J.C. Crespo should prepare a presentation to give in Munich.

## Asian workshop

This will be the first non-European SPHERIC event, to be organised by Prof. M. Liu (Peking University). Attendance of SPHERIC SC members is encouraged.

Dates, venue: early October 2016, Beijing.

The SC may be involved in the Scientific Committee.

Main issue: M. Liu would like parallel sessions and poster sessions, since Chinese participants feel more comfortable with that. A training day will be organised.

The announcement is to be expected soon. The workshop is to be advertised on the website soon.

BR will have a Skype call with Liu to discuss details.

#### Regular issues

New benchmarks: do we need some more? D. Violeau mentions the need of a case with rigid body free motion in water (*e.g.* neutrally buoyant cylinder). R. Vacondio suggests a 3D dam break from Aureli *et al.* (2015), Adv. Water Res.

The new website is ready to go. The SC gave its approval.

Next issue of the newsletter: B. Rogers and A. Souto Iglesias will send something, and X. Hu will prepare a contribution about the Munich workshop. D. Violeau will ask M. Liu to advertise the Asian workshop. T. Rung and P.K. Stansby may be approached to advertise on the journal special issues. N. Quinlan will send a list of new publications. D. Violeau will look for 3 additional (technical) contributions.

Bibliography database: N. Quinlan said that 775 references are now on the SPHERIC section of CiteUlike; 15 reference were added since June.

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