



## Smoothed Particle Hydrodynamics European Research Interest Group

### Minutes of the Steering Committee meeting

12 and 14 June, 2017

Universidade de Vigo, Campus As Lagoas, Ourense

#### SC members present:

Ben Rogers, University of Manchester, UK (chair)  
Stefano Sibilla, Università di Pavia, Italy (secretary)  
Alex Crespo, Universidade de Vigo, Spain (webmaster) (12 June only)  
Renato Vacondio, Università di Parma, Italy (newsletter editor)  
Andrea Colagrossi, CNR-INSEAN, Italy (14 June only)  
Matthieu de Lefte, Nextflow Software, France  
Xiangyu Hu, Technische Universität München, Germany  
David Le Touzé, École Centrale de Nantes, France  
Jean-Christophe Marongiu, Andritz Hydro, Switzerland  
Antonio Souto-Iglesias, Universidad Politecnica de Madrid, Spain  
Rade Vignjevic, Brunel University, UK (14 June only)  
Damien Violeau, EDF R&D, France (14 June only)

#### Also present:

Corrado Altomare, Flanders Hydraulic Research, Universiteit Gent, Belgium  
Pablo Loren-Aguilar, University of Exeter, UK (14 June only)  
Ricardo Canelas, Universidade de Lisboa, Portugal (14 June only)  
Peter Eberhard, Universität Stuttgart, Germany (14 June only)

#### Apologies:

Nathan Quinlan, NUI Galway, Ireland  
Thomas Rung, Technische Universität Hamburg-Harburg, Germany

### Specific issues

#### 1. Update on Ourense 2017 workshop:

Alex Crespo reports 123 participants, 45 of which are registered as students. 91 abstracts were received for 59 talks: 4 papers were withdrawn after selection and were replaced by the first papers just below the selection threshold; 23 papers are eligible for the student prize. The overall budget of the workshop, including the payment of a 21% VAT on each registration, is in balance.

There were 28 participants to the training day, which proved to be successful because who made the first lectures in the morning coordinated well with people running the practical section in the afternoon.

## **2. Roles in SC**

Nathan Quinlan, who has been secretary of the SC since 2006, asks to resign from this role, to focus on the organization of the 2018 workshop. Damien Violeau, who also started editing the Newsletter in 2006, asks for someone to take his place.

Stefano Sibilla is appointed as new secretary of the SC. Antonio Souto will take charge of the update of the SPH bibliography, which was also Nathan Quinlan's task. Renato Vacondio is appointed as the new Newsletter Editor.

## **3. SPHERIC Governance**

Ben Rogers reports that a decision on the formal adhesion of SPHERIC to IUTAM was postponed because of the lack of by-laws of SPHERIC. Peter Eberhard explains that by-laws should essentially define functions and rules of the SC, of the Chairman and Secretary; they should make clear that SPHERIC is a no-profit organization, with a common interest and a scientific scope. The SC agrees to set up a working group to prepare a draft for the by-laws for the autumn SC meeting: the group will be composed by present and past chairs Ben Rogers, Damien Violeau and David Le Touzé, by present and past secretaries Stefano Sibilla and Nathan Quinlan, and by Peter Eberhard.

## **4. 2019 workshop**

A former SC indication to possibly host the 2019 SPHERIC workshop in Istanbul is reviewed by the SC, owing to the situation in Turkey. The SC has reservations that attendance at the workshop may be significantly lower due to (i) concerns of delegates visiting Turkey with the current situation, and (ii) to the fact that several European institutions, at present, do not support staff travelling to Turkey for scientific activities. The SC decides to postpone any decision on a possible SPHERIC workshop hosting in Istanbul.

For the next years, Pablo Loren-Aguilar offers the availability of the astrophysics group in the University of Exeter (UK) to host the workshop. Ricardo Canelas also says that there might be a possibility to host the workshop in Lisbon: however, as he is the main person in charge of SPH research there and he has not got a permanent position, he must first obtain availability by the faculty staff. There was also an option to host the workshop in Stuttgart in 2020, but Peter Eberhard says that it could be difficult for him to organize in Stuttgart in 2020. Finally, Stefano Sibilla offers his availability to host the workshop in Pavia at any time.

The SC agrees for the following possible scheduling:

- 2019: Exeter (UK)
- 2020: Lisbon (Portugal), to be confirmed in the Autumn meeting
- 2021: Stuttgart (Germany)
- 2022: Pavia (Italy)

## **5. Publication of SPHERIC proceedings**

Ben Rogers reports that there are two different options for publishing the workshop proceedings within ERCOFTAC: (i) publishing the proceedings in the ERCOFTAC book series (which are indexed in Scopus); (ii) publishing the best 10-15 papers in a special issue of the ERCOFTAC journal (Flow Turbulence and Combustion).

However, in both cases a further review process would be needed, moreover, someone does not want his paper to be published as part of proceedings, because it can be used as initial draft for a full journal paper. Finally, papers published as book series and indexed in Scopus may receive a low number of citations or no citations at all, and this can eventually damage the institutions of the authors in university rankings.

For the mentioned reasons, the SC agrees to maintain the actual “workshop spirit” of SPHERIC and to maintain the proceedings with ISSN number assignation as they are at present.

## **6. Wikipedia entry on SPH**

The English entry on SPH in Wikipedia looks always the same and still does not satisfy the expectations of the SC. Andrea Colagrossi, helped by Antonio Souto, will prepare a first draft of a new page for the autumn SC meeting.

## **7. Special Issues of Journals**

David Le Touzé reports that Computer & Fluids agreed to make a special issue on SPH. The Guest Editors will be Renato Vacondio, Alex Crespo, Steven Lind and David Le Touzé. The proposed title is “Theoretical, numerical and computational advances of the SPH method for solving fluid problems”. The submission deadline may be fixed around December 2017, or at most extended to February 2018. The target number is 20 papers, but in principle it may go as low as 12 or as high as 40. The special issue will be advertised during the Ourense and Beijing Workshops.

Ben Rogers complains that the number of journal papers on SPH is growing to more than 200 per year, while the quality (both in terms of scientific relevance and citations) is getting lower and lower. He will recall this issue during the workshop opening.

## **8. Monaghan Prize**

The 2<sup>nd</sup> Monaghan prize will be assigned at the 2018 Galway workshop. Papers published in 2011-2015, which represent a clear advance in one of the 5 SPHERIC Grand Challenges, will be eligible. The SC agrees to maintain the same procedure: anyone who wants to nominate a paper, will make their nomination together with a short text explaining their motivation; nominations can be made by anyone. The SC will review the nominated papers, among which the SPHERIC 2018 attendees will choose the winner, who will be invited to give a lecture in the 2019 workshop.

The SC agrees also on the idea that, as a rule, the winning entry of the previous JMM prize will be invited to run the following one. Andrea Colagrossi will therefore run the 2<sup>nd</sup> JMM prize.

## **9. Galway 2018 workshop**

With Nathan Quinlan not present in Ourense, Ben Rogers reports on the current progress of the workshop organization. The workshop will be held on June, 26-28 (Tuesday to Thursday) in a venue with 250 seats. The training day will take place on Monday, June 25: the computer room will be in the same building as the conference room.

The overall workshop budget should be around € 38.000,00. There are at present several alternatives for the banquet: a historical walking tour of Galway or a boat trip, with a dinner either in an abbey or a castle. Accommodations in the campus will be available, starting from about 50 €/room.

The workshop format will be maintained as it is at present. For the keynote lectures, the SC suggests former chair David Le Touzé, who never gave a keynote lecture at SPHERIC previously; the second keynote lecturer may be Marco Ellero, Paul Meakin or Eric Farenthold.

## **10. June issue of the SPHERIC newsletter**

The June issue of the newsletter will be managed jointly by Damien Violeau and Renato Vacondio. It will contain the Ourense workshop program and contributions by the three Libersky prize winners, together with announcements for the October 2017 Beijing SPHERIC workshop, for the 2<sup>nd</sup> JMM prize and for the forthcoming journal special issues on particle methods.

## **11. SPHERIC Grand Challenges**

Rade Vignjevic expresses the opinion that the groups on GC did not work and did not do anything useful: he suggests that the GC leaders publish at least some contributions on the newsletter. He also suggests to look to the post-docs who are still active in SPH to revitalize the GC activity. Ben Rogers will track down the individuals, contact them and proceed in this sense.

## **12. Autumn SC meeting**

The autumn meeting of the SC will take place in Rome, at INSEAN, on Friday 17 November. The working group on the SPHERIC by-laws will meet in the same place on the day before, Thursday 16 November.