

Newsletter August 2008: Splitting-Group in Action

Dear Colleagues, Students and Friends of our Splitting Group in Action, many activities have been taken place and summer break helps to get some new ideas.

Thanks for the activities in the first part of the year, in the next part we will also have next events and prepare next works.

Splitting methods are going on to get an important topic in the next years.

In conferences, we heard that methods are needed to solve multi-scale and multi-physics problems.

Further recoding will be important to use standard codes and modify them to new problems. To couple mixed evolution equations are important and to solve multiple time and spatial scales are needed.

Such problems can be done with our splitting methods while recovering the ideas of their underlying coupling effects and controlling their errors.

It is good to develop such methods and taken into account recent upcoming research topics.

New members to our splitting group are coming of such important areas and new papers will go on in these topics to contribute splitting ideas.

The recovery of our methods stand and fall with the knowledge of their applications to new fields. By the way new problems have been passed to apply our methods to mixed problems. Often restriction to special domains and scales have to be overcome, to solve such problems a good overview and distributed knowledge is necessary.

Inter- and transdisciplinarity are important, a good network to get such significant inputs to solve our problems.

This is what we hope to create in our splitting group: a network of multiple disciplines and to help each others to create new methods.

By the way, we need a platform to discuss, e.g. conferences, and funds to realize our ideas, e.g. national and international investors.

Let us join the next events and write new proposals.

Some next events are coming in fall, see the workshop in Innsbruck.

Please see some new conferences for next year: MIT, SCICADE, NUMDIFF.

Many thanks for the activities in our network and have nice time.

Best regards,

Juergen Geiser

Next events and remarks :

- 1.) Workshop 2008, Annual conference 2009.
- 2.) Next year events
- 3.) Special Issues
- 4.) Open positions
- 5.) Foundations
- 6.) Remarks

ad 1.) Conferences 2008 :

1.1.) Innsbruck, October 2008.

A conference with the special topic, "Splitting Methods in Time Integration", is now announced.

organizer : Prof. A. Ostermann, University of Innsbruck, Austria ,

Time and Location:

October 15-18, 2008, Innsbruck, Austria

<http://techmath.uibk.ac.at/numbau/alex/events/conference2008.html>

Deadlines:

Submitting an abstract: August 20, 2008.

A tentative program : August 2008,

Final program : September 2008.

For registration please contact Prof. Ostermann : alexander.ostermann@uibk.ac.at
or Felix Kramer : Felix.Kramer@uibk.ac.at

ad. 2.) Events in 2009

2.1.) MIT, June 2009

Our annually conference in 2009 will be held at MIT, Boston, USA :

Fifth M.I.T. Conference on Computational Fluid and Solid Mechanics : Advances in CFD, June 17 - 19, 2009

please visit: <http://www.fifthmitconference.org>

Recent Advances in Decomposition Methods for Computational Fluid Mechanics: Theory and Applications Organizers : Geiser Juergen, Sheng Qin

See our mini-symposium page:

<http://www.mathematik.hu-berlin.de/>

2.2.) Scicade, Beijing, May 25-29, 2009.

see :

<http://www.conferencenet.org/conference/scicade.htm>

2.3.) Numdiff 12, Halle, September 2009.

see :

<http://sim.mathematik.uni-halle.de/numdiff/Numdiff12/>

ad. 3.) Special Issue :

3.1.) Juergen Geiser and Roland Glowinski:

Title : Operator Splitting methods and ADI methods,

to be published in Springer (Texts and monographs in Scientific Computing, edited by W. Beiglboeck), Deadline Summer, 2008.

First we collect all papers of interested contributors. In a next step we decide the acceptance of the contributed papers. Please let us know you interest.

3.2.) Special issue of our annually best conference papers.

to be announced soon.

ad 4.) Open positions :

4.1.) Postdoctoral Position Available Institut Charles Gerhardt Montpellier (ICGM), CNRS and University Montpellier 2, Montpellier, France. Available September 2008 Apply to : Dr. Benoit Coasne, benoit.coasne@univ-montp2.fr

ad 5.) International Foundations

5.1. European Science Foundation (ESF) and European Research Council (ERC) :

see : <http://www.esf.org/research-areas/physical-and-engineering-sciences.html>

and

see: <http://erc.europa.eu/index.cfm>

Prof. Ostermann, Innsbruck, Austria, will have some further information. Please let him know your interest.

ad 6.) Additional remarks

New conferences, open positions, new special issues can be announced.

Please let me know your ideas and feedback.

Thanks for your time and your cooperation.

With best regards,

Juergen Geiser