

# INTERNATIONAL CONFERENCE FOR MESOSCOPIC METHODS IN ENGINEERING AND SCIENCE

Conference July 26 - 29, 2004  
Courses July 30, 2004

Further information can be found at:

<http://www.icmmes.org>



TECHNICAL UNIVERSITY  
CAROLO-WILHELMINA  
AT BRUNSWICK

## INFORMATION

### IMPORTANT DATES

Early Registration	before April 15, 2004
Abstract submission deadline	May 1, 2004
Notification of acceptance	June 1, 2004
Conference	July 26 - 29, 2004
Courses	July 30, 2004

The chairman of the local organizing committee is Prof. Manfred Krafczyk.

### LOCATION

Aula (Assembly Hall)  
Technical University  
Carolo-Wilhelmina at Brunswick  
Pockelsstr. 11  
D-38106 Braunschweig  
Germany



### CONTACT

Inst. für Computeranwendungen im  
Bauingenieurwesen (CAB)  
Conference Committee ICMMES  
Pockelsstraße 3  
D- 38106 Braunschweig  
Germany

Tel: +49 531/391-7592  
Fax: +49 531/391-7599

E-Mail: [info@icmmes.org](mailto:info@icmmes.org)  
Internet: <http://www.cab.bau.tu-bs.de/englisch/>

## FOCUS & OBJECTIVES

The focus of the Conference series is on mesoscopic / kinetic methods (e.g. LBE, DVM, GKS, and SPH) for computational mechanics in its broadest sense. Specific areas include, but are not limited to, mesoscopic / kinetic methods applied for:

- Computational Fluid Dynamics (CFD), including Direct Numerical Simulations (DNS), Large-Eddy Simulations (LES), and macroscopic as well as kinetic turbulence modelling;
- Rheology for complex fluids, such as suspensions, multi-phase and multi-component fluids, non-Newtonian fluids, electro-rheological (ER) and magneto-rheological (MR) fluids (smart fluids) and bio-fluids;
- Nano-scale phenomena involving non-continuum, surface-dominated, low-Reynolds-number, non-Newtonian, multi-scale and multi-physics effects;
- Computational mechanics of solids and structures based on mesoscopic models;
- Computational multi-physics dynamics, such as flow-structure interactions;
- Algorithms for High Performance Computing (HPC) engineering applications.

The objectives of the Conferences are:

- to bring together researchers and practitioners from academia, research institutions and industry to exchange experiences, disseminate up-to-date information, and explore new opportunities in the field;
- to expose young or new researchers to the state of the art in the field, by means of, in addition to the Conferences, short courses and the internet media;
- to play a leading role in research and development in the field.

## COURSES AND FEES

### COURSES

Short courses on mesoscopic methods will be offered on Friday, July 30. The fee for the courses (incl. course material, lunch, coffee and beverages during breaks) is 100 € for conference participants and 250 € for other individuals. A list of topics and speakers is under construction.

### REGISTRATION FEES

Conference fees for participants cover:

- Participation in all scientific activities
- Book of abstracts
- Coffee and beverages during breaks
- Lunch
- Welcome reception
- Conference Banquet
- Free public transport in Braunschweig
- Social event
- Conference Proceedings

#### Early Registration before April 15th 2004

Students (letter of institution required) :	200 €
Academic :	450 €
Industry / Others :	650 €

#### Late Registration after April 15th 2004

Students (letter of institution required) :	300 €
Academic :	550 €
Industry / Others :	750 €

#### On-site Registration (cash only)

Students (letter of institution required) :	350 €
Academic :	600 €
Industry / Others :	800 €

Accompanying person	100 €
---------------------	-------

#### Course tuitions (Friday, July 30)

Conference Participants	100 €
Other individuals	250 €

Conference fees for accompanying persons cover:

- Lunch
- Welcome reception
- Conference Banquet
- Free public transport in Braunschweig
- Social event
- Guided tour

## INVITED SPEAKERS (as of 02/10/2004)

### John Abraham\*

Purdue University, USA

### Cyrus Aidun

Georgia Institute of Technology, USA

### Ali Beskok

Texas A&M University, USA

### Dominique d'Humières\*

Ecole Normale Supérieure, France

### Irina Ginzburg

CEMAGREF, France

### Sharath Girimaji

Texas A&M University, USA

### Alfons Hoekstra

University of Amsterdam, The Netherlands

### Myung S. Jhon

Carnegie Mellon University, USA

### Michael Junk\*

University of Saarland, Germany

### Raymond Kapral

University of Toronto, Canada

### Axel Klar

Technical University of Darmstadt, Germany

### Manfred Krafczyk\*

Technical University of Braunschweig, Germany

### Pierre Lallemand

ASCI Lab., France

### Li-Shi Luo\*

Old Dominion University, USA

### Dimitri Mavriplis

University of Wyoming, USA

### Dewei Qi

Western Michigan University, USA

### Mar Serrano

Universidad Nacional de  
Educacion a Distancia, Spain

### Gerhard Wellein

University of Erlangen-Nuremberg, Germany

\* to be confirmed

\* to deliver lectures in the short course

## INTERNATIONAL SCIENTIFIC COMMITTEE

### Prof. John Abraham

School of Mechanical Engineering  
Purdue University, USA

### Dr. Jos J. Derksen

Kramers Laboratorium voor Fysische  
Technologie  
Technical University of Delft, The Netherlands

### Prof. Franz Durst

Institute of Fluid Mechanics (LSTM)  
University of Erlangen, Germany

### Prof. Sharath Girimaji

Department of Aerospace Engineering  
Texas A&M University, USA

### Prof. Axel Klar

FB Mathematik  
Technical University of Darmstadt, Germany

### Prof. Manfred Krafczyk

Institute for Computer Applications in Civil  
Engineering (CAB)  
Technical University of Braunschweig, Germany

### Prof. Anthony J.C. Ladd

Department of Chemical Engineering  
University of Florida, USA

### Prof. Pierre Lallemand

ASCI Laboratory  
Université Paris Sud, France

### Dr. Li-Shi Luo

National Institute of Aerospace, USA

### Prof. Dimitri Mavriplis

Department of Mechanical Engineering  
University of Wyoming, USA