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Dr. Mikhail Shashkov (LANL)

Dr. Ulisse Stefanelli (IMATI CNR, Pavia)

LOCAL ORGANIZATION

Prof. Ferdinando Auricchio

Dr. Alessandro Reali

Ms. Elisa Reali

CONTACTS

For further information you may also contact us through the official e-mail address of the congress: multimat09@eucentre.it

Ms. Elisa Reali e-mail: <u>elireali@gmail.com</u>
Tel: + 39-0382-985704 Fax: + 39-0382-528422

Dr. Alessandro Reali e-mail: <u>alereali@unipv.it</u> Tel: + 39-0382-985704 Fax: + 39-0382-528422

CONFERENCE WEBSITE

http://www.eucentre.it/multimat09/

CONFERENCE VENUE

The Conference will take place at the Auditorioum of Collegio Riboldi, a refurbished church originally designed by Richini and constructed between 1628 and 1632. It is located in Via Luigi Porta, 4, in Pavia.

ACCOMODATION

As there is not a conference hotel, attendees have to proceed with personal reservations in one of the hotels in Pavia (see the following list): **Hotel Moderno** **** - Viale Vittorio Emanuele 41, 27100 Pavia, Tel: + 39 0382 303401, Fax: + 39 0382 25225, www.hotelmoderno.it, info@hotelmoderno.it

Hotel Cascina Scova **** - Via Vallone 18, 27100 Pavia,

. Tel: + 39 0382413604 , Fax: + 39 0382 476328,

www.cascinascova.it, resort@cascinascova.it

Hotel Rosengarten *** - Piazza Golgi 21/23, 27100 Pavia,

Tel: + 39 0382 526312, Fax: + 39 0382 525186, www.rosengarten.pv.it, rosengarten.pv@tin.it

Hotel Excelsior *** - Piazzale Stazione 25, 27100 Pavia, Tel: +39 0382 28596, Fax: +39 0382 26030,

www.hotelrizpavia.com, info@excelsiorpavia.com

Hotel Aurora ** - Viale Vittorio Emanuele 25, 27100 Pavia, Tel: + 39 0382 23664 . Fax: + 39 0382 21248.

www.albergoaurora.com, info@albergoaurora.com

PAVIA

Pavia is a town of south-western Lombardy, northern Italy, 30 km south of Milan on the lower Ticino river near its confluence with the Po. The Old Bridge (Ponte Vecchio) on the Ticino is a symbol of Pavia. Pavia's most famous landmark is the Certosa, founded in 1396 and located few kilometers out of the city. Among others, notable monuments are: Cathedral of Pavia (Duomo di Pavia), San Michele Maggiore (St. Michael), Basilica of San Pietro in Ciel d'Oro (St. Peter in Golden Sky), S. Teodoro, the church of Santa Maria del Carmine, the large fortified castle, Castello Visconteo, and the ancient University that was founded in 1361.

From Pavia it is easy to reach Milan, famous for its Churces like Duomo and Basilica of Sant'Ambrogio and Museums like the Cenacolo Vinciano (Leonardo's Last Supper), the La Scala Theater Museum, the Pinacoteca di Brera, the Museum of Ancient Art and the Museum of Science and Technology. Milan is also famous for the Galleria Vittorio Emanuele, called The Milan Lounge, and luxury shopping: Via Montenapoleone, Via della Spiga and Via Sant'Andrea are three elegant streets of the famous Fashion District.

From Pavia it is also easy to reach by car or public transportation (e.g., train) many beautiful sites like Bellagio and other nice towns on lake Como, Venice, Verona, Turin, Genoa, Bologna, Florence, etc.





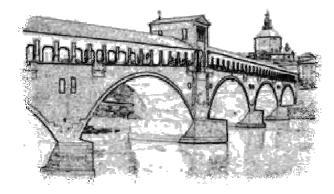
Faculty of Engineering University of Pavia - Italy





Numerical Methods for Multi-Material Fluids and Structures

Pavia, Italy September 21-25, 2009



AIMS

The conference follows on from the successful meetings held in Paris in 2002, in Oxford in 2005 and in Prague in 2007. It aims at bringing together researchers from universities and research labs to discuss the state of the art for multi-material hydrodynamics simulations. It will focus on relevant numerical methods, on the analysis of such methods and on the modeling of complex multi-material flows which is essential for research dealing with new sources of energy as inertial confinement fusion.

TOPICS

Mathematical and physical aspects of:

- ✓ Arbitrary Lagrangian Eulerian (ALE) Methods
- ✓ Eulerian Methods
- ✓ Mesh-free Methods
- ✓ Material Interface Modelling
- ✓ Multiphase Flow
- ✓ Radiation Hydrodynamics
- Numerical Methods for Complex Constitutive Models
- ✓ Numerical Methods for Transient/Fast Dynamics
- ✓ Isogeometrical Analysis

LOCAL HOSTING INSTITUTIONS

Center for Advanced Numerical Simulation (Centro di Simulazione Numerica Avanzata-CeSNA): center of the Istituto Universitario di Studi Superiori (IUSS), is located in Pavia and is headed by Prof. F. Brezzi. CeSNA is active in studying numerical methods with application to many areas of applied mathematics, e.g., engineering, physics and biology.

European Centre for Training and Research in Earthquake Engineering (Eucentre): located in the scientific campus of the University of Pavia, Eucentre (headed by Prof. G.M. Calvi) is a Foundation launched by the University of Pavia, the Italian Department of Civil Protection, the Italian National Institute for Geophysics and Vulcanology and by the University Institute for Advanced Studies, with the aim of promoting, sustaining and overseeing training and research in the field of the reduction of seismic risk.

Institute for Applied Mathematics and Information Technology (Istituto di Matematica Applicata e Tecnologie Informatiche-IMATI): located in the scientific campus of the University of Pavia, IMATI (headed by Prof. F. Brezzi) is a CNR centre active in numerical analysis,

computational mechanics, computational electromagnetics, calculus of variations and mathematical physics.

Mathematics Department (Dipartimento di Matematica "F. Casorati"): the Mathematics Department is located in the scientific campus of the University of Pavia, and its research activities span many areas of pure an applied mathematics, such as algebra, geometry, functional analysis, mathematical physics, numerical analysis and statistics.

Structural Mechanics Department (Dipartimento di Meccanica Strutturale-DMS): located in the scientific campus of the University of Pavia, DMS (headed by Prof. F. Auricchio) is a department where basic and applied research is carried out in the field of the mechanics of structures and materials. Areas of interests cover civil and industrial engineering, biomechanics and, in general, all technical and scientific fields where structures play a relevant role

PARTNER INSTITUTIONS

Atomic Weapon Establishment (AWE), UK: AWE has been central to the defence of the United Kingdom for more than 50 years. AWE plays a crucial role in the defence of the United Kingdom, by providing and maintaining the warheads for the country's nuclear deterrent.

Commissariat à l'Energie Atomique (CEA), France: the French Atomic Energy Commission is a public technological research organization. The CEA - a prominent player in research, development and innovation - is active in three main areas : energy, healthcare and information technology, defense and global security.

Lawrence Livermore National Laboratory (LLNL), USA: Lawrence Livermore National Laboratory is a premier research and development institution for science and technology applied to USA security. LLNL is responsible for ensuring that the USA nuclear weapons remain safe, secure, and reliable. LLNL also applies its expertise to prevent the spread and use of weapons of mass destruction and strengthen homeland security.

Los Alamos National Laboratory (LANL), USA: Los Alamos National Laboratory is a premier USA security research institution, delivering scientific and engineering solutions for the nation's most crucial and complex problems. LANL primary responsibility is ensuring the safety, security, and reliability of the USA nuclear deterrent.

Sandia National Laboratories (SNL), USA: Sandia National Laboratory is a USA security laboratory involved in

a variety of research and development programs to help secure a peaceful and free world through technology. SNL develops technologies to sustain, modernize, and protect the US nuclear arsenal, prevent the spread of weapons of mass destruction, defend against terrorism, protect USA infrastructures, ensure stable energy and water supplies, and provide new capabilities to USA armed forces.

IMPORTANT DATES

February 23, 2009: Opening of Abstract Submission March 1 – April 30, 2009: Early Registration May 1 – July 10, 2009: Regular Registration May 31, 2009: Deadline for Abstract Submission July 11 – September 21, 2009: Late Registration

ABSTRACT SUBMISSION

Authors are invited to submit a 1-page abstract in English (using the format available on the website:

http://www.eucentre.it/multimat09/media/abstract.tex) to be considered for oral presentation at Multimat09. The submission deadline is May 31, 2009. Please send abstracts via email at multimat09@eucentre.it (attaching both .tex source and .pdf files).

REGISTRATION

Registration for the Congress will open on March 1, 2009. The standard method of payment is by credit card through the conference website. The fees indicated below include the conference schedule and booklet of abstracts, the reception, the banquet, all break refreshments, and access to all sessions. The organizing committee is trying to arrange a visit to the Certosa di Pavia (Charterhouse of Pavia, founded in 1396), a famous monastery complex situated 8 km North of Pavia. The Certosa di Pavia is renowned for its exuberant architecture, in both the Gothic and Renaissance styles, and for its collection of artworks, particularly representative of the region.

Early registration (by April 30, 2009): 425 ∈ Regular registration (by July 10, 2009): 500 ∈ Late registration: 575 ∈

Spouses and accompanying persons can participate to the reception for an extra fee of $30 \in$, and to the conference banquet for an extra fee of $60 \in$.