train station Exhibition at Barcelona

Location

The conference will take place at Institute for Statics and Dynamics of Aerospace Structures (ISD), University Stuttgart, Germany,

Registration Fees

The registration fees, including social events, with early registration applicable if received before 30 June 2005, are:

	Early	Late
Delegates	400 €	500 €
Students	200 €	250 €

The fees include:

- Conference Proceedings
- Attendance at all scientific sessions
- Coffee breaks, reception and banquet

Social Programme

A social programme for delegates and accompanying persons will be arranged, including a reception and a banquet at a local place of interest.

Accommodation

Block reservations at preference rates will be arranged by the organizers. Detailed information will be available on the Conference site. on the link "Accommodation".

Supporting Organisations

- · European Community on Computational Methods in Applied Sciences (ECCOMAS)
- International Association for Computational Mechanics (IACM)
- · International Association for Shell and Spatial Structures (IASS)
- Universitat Politècnica de Catalunya (UPC)
- Build Air Ingenieria y Arquitectura S.A.
- Airship Technologies
- Quantech ATZ SA
- Sistemas SA







Structural Membranes 2005

International Conference on Textile Composites and Inflatable Structures

2-4 October 2005, Stuttgart, Germany



Edificio C1, Campus Norte UPC Methods in Engineering nternational Center Gran Capitán, s/n

08034 Barcelona, Spain

Fel: +34 934017441

Membranes 2005

Structural

Fax: +34 934016517

Stuttgart

Airship hangar,

COMPASS Ingeniería y

University Stuttgart, Germany

Objectives

Textile composites and inflatable structures are becoming increasingly popular for a variety of applications in - among many other fields - civil engineering, architecture and aerospace engineering. Typical examples include membrane roofs and covers, sails, inflatable buildings and pavilions. airships, inflatable furniture, airspace structures etc. The objectives of STRUCTURAL MEMBRANES 2005 are to collect and disseminate state-of-the-art research and technology for design, analysis, construction and maintenance of textile and inflatable structures.

The ability to provide numerical simulations for increasingly complex membrane and inflatable structures is advancing rapidly due to computer hardware development and the improved maturity of computational procedures for nonlinear structural systems. Significant progress has been made in the formulation of finite element methods for static and dynamic problems, complex constitutive material behaviour, coupled aero-elastic analysis etc. The conference will address both the theoretical bases for structural analysis and the numerical necessary for efficient and robust computer implementation.

A significant part of the conference will be devoted to discuss advances in new textile composites for applications in membrane and inflatable structures, as well as in innovative design. construction and maintenance procedures.

Sessions related to specific topics of the conference will be introduced by a keynote lecture in the respective field. These keynote lectures will be complemented by invited sessions organised by recognised experts in targeted research and applied areas, as well as by contributed papers.

Structural Membranes 2005 aims to act as a forum for discussing recent progress and identifying future research directions in the field of textile composites and inflatable structures.



- Environmental Aspects

- Pressure Management

- Applications: membrane

roofs and covers, sails.

inflatable pavilions and

buildings, airships, airspace structures inflatable antennas.

Adaptivity

furniture, etc.

- Design Methods
- Numerical Methods for Structural Analysis
- New Membrane Materials
- Testing Procedures
- Manufacturing
- Construction Methods
- Maintenance Techniques
- Energetic Aspects
- Climate Impact

Conference Chairmen

E. Oñate, Univ. Politecnica de Catalunya, Barcelona, Spain

B. Kröplin, University of Stuttgart, Germany

Technical Advisory Panel

M.C. Bernasconi, Switzerland

K-U. Bletzinger. Germany

R. Blum, Germany

D. Campbell, USA F. Escrig, Spain

F. Flores, Argentina

A.J. Gil. UK

V. Gomez Molinero, Spain

K. Ishii. Japan

M. Kawaquchi, Japan

K. Kurokawa, Japan

K.W. Linkwitz. Germany

J. Llorens. Spain

M. Majowiecki, Italy J. Marcipar, Spain

E. Moncrieff.Germany

J. Monjo, Spain

J. Miguel Canet, Spain

M. Mollaert. Belgium

R. Motro. France

H. Ohmori, Japan

M. Papadrakakis. Greece

S. Pellegrino, UK

J. Perez Valcárcel, Spain

A. Pronk. Netherlands

E. Ramm, Germany

R. Rossi, Italy

M. Saitoh, Japan

A. Samartín, Spain

V. Sarrablo, Spain

R. Sastre, Spain

K. Schweizerhof. Germany

E. Stach. USA

E. Stein, Germany

R. Tarczewski. Poland

R. L. Taylor, USA

R. Wagner, Germany

D. Wakefield, UK

P. Wriggers, Germany

An ECCOMAS Thematic Conference

Structural Membranes 2005 is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS) and it has been promoted by the European Committee in Solids and Structural Mechanics (ECSSM) of ECCOMAS. For further information on ECCOMAS visit: www.eccomas.org

Important Dates

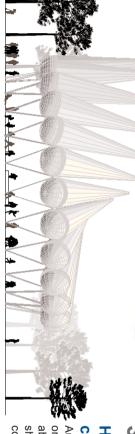
Deadline for presenting one-page abstract Acceptance of the paper and instructions Deadline for submitting a full paper and early payment Booking of hotel accommodation

14 March 2005 19 April 2005 30 June 2005

ASAP

Exhibition

An exhibition on membrane and inflatable structures will be organized in connection with the Conference. Interested exhibitors can find the necessary information on the conference website.



Structural **Membranes**

How to register and submit

and conference registration electronically via the submit their contributions nce topics. Submission of

http://congress.cimne.upc.es/membranes05