



University of Parma



University College London



Fraunhofer Institute for Structural Durability and System Reliability, Darmstadt



European Structural Integrity Society



German Association for Materials Research and Testing



French Society for Metallurgy and Materials



ASTM International Standards Worldwide

## Conference Announcement and First Call for Papers

### ICMFF9

Parma (Italy), 7 -10 June, 2010

Website: <http://www.ICMFF9.unipr.it>

## The Ninth International Conference on Multiaxial Fatigue & Fracture



## Foreword

The aim of this conference is not only to display the substantial international progress achieved but also to illustrate how to apply research results to industrial practice and how to close the gap between design and manufacturing engineers and scientists.

Despite increased efforts in understanding of multiaxial fatigue and fracture behaviour, failure assessment procedures are now becoming more complex. Therefore, it is essential to review the progress via a forum that includes experimentalists, theoreticians, industrial practitioners and academic experts.

**Special Issues of International Journals** with extended versions of selected papers presented at ICMFF9 will be published after the Conference:

### **International Journal of Fatigue**

Special Issue on Multiaxial Fatigue

### **Engineering Fracture Mechanics**

Special Issue on Multiaxial Fracture

## Scientific Committee

F.P. Brennan, Cranfield	T. Palin-Luc, Talence
Jaime Dominguez, Seville	A. Pineau, Evry
M. de Freitas, Lisbon	M. Sakane, Kusatsu
F. Ellyin, Vancouver	A. Shanyavskiy, Moscow
A. Fatemi, Toledo	S. Shukayev, Kiev
G. Glinka, Waterloo	M. Skorupa, Cracow
F. Iacoviello, Cassino	D. Socie, Urbana
M.N. James, Plymouth	A. Spagnoli, Parma
P. Lazzarin, Padua	S. Stefanov, Sofia
J. Liu, Shanghai	R. Sunder, Bangalore
E. Macha, Opole	K. Tanaka, Nagoya
G. Marquis, Helsinki	D. Taylor, Dublin
Y. Murakami, Fukuoka	M. Vormwald, Darmstadt
A. Navarro, Seville	J.R. Yates, Sheffield
J.C. Newman, Mississippi	H. Zenner, Dresden

## Conference Chairmen

Andrea Carpinteri, Parma

Les P. Pook, London

C. M. Sonsino, Darmstadt

## Main topics of the Conference

Members of different industrial laboratories and scientists from all over the world are invited to contribute with presentations on any of the following topics:

### 1. Loading

Constant amplitude (LCF, MCF, HCF); Variable amplitude and damage accumulation; Gigacycle fatigue; Thermal fatigue and creep; Contact fatigue; Proportional and non-proportional loading

### 2. Fracture Mechanics

Initiation and short crack growth; Mixed mode behaviour; Multiaxial fracture

### 3. Materials

Metallic; Non-metallic; Defects and inhomogeneities; Constitutive modelling; Damage mechanics

### 4. Testing and Applications

Design (notches and stress concentrations); Joined structures; Residual stresses; Case studies; Virtual simulation; Experimental verification

## Conference venue

Parma is a cosy and pleasant medium sized city in the north of Italy. It is situated between Milan and Bologna, and has good air and rail links. It is an arts and science centre, which combines tradition with a modern approach. Parma has a strong cultural heritage. The basis of the Scuola Palatina was founded in Parma in 781 A.D., during a meeting between Charlemagne and the Irish monk Alcuin. The University of Parma is very ancient, it was founded about one thousand ago: with the Decree of March 962, Emperor Otto I conferred to the Bishop Uberto the right to ordain the notaries who could conduct their activities all over the Empire. Parma is the birthplace of the great composer Giuseppe Verdi and of other well-known Italian artists. It is a wonderful tourist centre, with many monuments, churches, museums and concert halls. Its best known local products are Parma Ham and Parmesan Cheese. The climate is fine, with a daytime temperature in June of about 24°C.

**Conference language: English**

## Submission of Papers

Experts in the fields mentioned in this leaflet are kindly requested to submit an abstract (**one A4 page maximum, only in PDF format, size lower than 1 Mb**) to:

Professor Andrea Carpinteri  
Dept of Civil Engineering  
University of Parma  
Viale G.P. Usberti, 181/A  
43100 Parma, ITALY  
Fax: +39 0521 905924  
E-mail: andrea.carpinteri@unipr.it

**by 25th October, 2009**

The abstract should contain:

- Title of the paper
- Authors (full address of the company , Fax number, e-mail, personal titles of the corresponding author and the co-authors)
- Statement of contents and main points

The Scientific Committee will decide whether to accept the abstract. It should clearly emphasize the principal scientific, technical, economical and practical aspects of the intended paper.

### Deadlines

Abstracts	25 Oct. 2009
Abstract acceptance	15 Dec. 2009
Camera-ready papers	15 Feb. 2010

### Sponsorship

Sponsorship is invited to support this event. Please contact Professor Andrea Spagnoli : [spagnoli@unipr.it](mailto:spagnoli@unipr.it)

Companies interested in presenting their products, processes and achievements relating to the subject and in offering personal consultancy will have the opportunity to do so in the exhibition which will be held parallel to the Conference. Please contact Professor Andrea Spagnoli : [spagnoli@unipr.it](mailto:spagnoli@unipr.it)