



University of Cassino



University of Parma



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European Structural Integrity Society



German Association for Materials Research and Testing



French Society for Metallurgy and Materials



ASTM International Standards Worldwide



IGF Italian Group of Fracture

## Conference Announcement and Call for Papers

### CP 2012

Gaeta (Italy), 19 - 21 September, 2012

Website: <http://www.CP2012.unipr.it>

## The Fourth International Conference on Crack Paths

## Foreword

Crack growth can take place under both static and fatigue loading. The complete solution of a crack growth problem includes the determination of the path taken by the crack. The crack path in a critical component or structure in aerospace, automotive, offshore and other industries can determine whether failure is benign or catastrophic. Knowledge of potential crack paths is also needed for the selection of appropriate non-destructive testing procedures.

This Conference follows the Conferences in Parma (Italy) in 2003 and 2006, and in Vicenza (Italy) in 2009. Special issues of international journals have been devoted to work presented at those Conferences.

**Special Issues of International Journals** with extended versions of selected papers presented at CP 2012 will be published after the Conference:

**Engineering Fracture Mechanics**  
Special Issue on Crack Paths

**International Journal of Fatigue**  
Special Issue on Fatigue Crack Paths

## Scientific Committee

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H. Askes, Sheffield	A. Navarro, Seville
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Z. Mroz, Warsaw	

## Conference Chairmen

Andrea Carpinteri, Parma  
Francesco Iacoviello, Cassino  
Les P. Pook, Sevenoaks  
Luca Susmel, Sheffield



## 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 (in the case of both static and fatigue loading):

Experimental Determination of CP  
Theoretical Prediction of CP  
Integrity Assessments based on CP Evaluation  
Microscopic Aspects of CP  
CP of Surface Cracks  
CP of Short Cracks  
Effect of Large Scale Yielding on CP  
Effect of Material Inhomogeneities on CP  
Effect of Non-Proportional Cyclic Loading on CP  
Effect of Environmental Conditions on CP  
CP in Advanced Materials  
Laboratory Methods of Controlling CP  
In-Service Inspection of CP  
Application of CP Concepts and Data in Design  
Industrial Application of CP Concepts and Data

## Conference venue

Gaeta is a cosy and small town in the south of Italy, situated between Rome and Naples (1 hour by train from both cities), and has good air and rail links. The climate is fine, with a daytime temperature in September of about 25°C. The best known local products are 'mozzarella' cheese, Gaetan olives and Gaetan tiella (a kind of pizza stuffed with a filling of vegetables or fish).

The Conference venue is in the Angevin-Aragonese Castle of Gaeta. The Castle was probably originally built in the sixth century during the war of the Goths. Then Frederick II of Swabia fortified the Castle in 1223. The present Castle consists of two buildings: the lower, called 'Angevin', was created during the French domination of Anjou; the upper, called 'Aragonese', was built by the Emperor Charles V. The Angevin wing has just been restored., and the 'University of Cassino' aims to use it as the seat of the Faculty of Maritime Disciplines in the future. The Aragonese wing presents the Royal Chapel, built by King Ferdinand of Bourbon in 1849, in the dome of the highest tower of the Castle.

## 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  
E-mail: [andrea.carpinteri@unipr.it](mailto:andrea.carpinteri@unipr.it)

**by 30th November, 2011**

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

All accepted papers will be published in the Proceedings of the CP 2012 Conference.

### Deadlines

Abstract submission	30 November, 2011
Abstract acceptance	15 January, 2012
Camera-ready papers	15 March , 2012

**Conference language: English**

### Sponsorship

Sponsorship is invited to support this event. Please contact Professor Francesco Iacoviello:  
Tel. / Fax +39 0776 2993681  
E-mail: [iacoviello@unicas.it](mailto:iacoviello@unicas.it)

### Accompanying Exhibition

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 Francesco Iacoviello.