



# ICCCM 2017

## 5<sup>th</sup> International Conference on Computational Contact Mechanics

5-7 July 2017, Lecce - Italy

Preliminary announcement



<http://iccm2017.unisalento.it>

### HOW TO REGISTER AND SUBMIT CONTRIBUTIONS

Prospective speakers are invited to submit a two-pages abstract. Acceptance/rejection letters for the abstracts will be sent according to the schedule.

Scheduling of contributions for oral presentation is conditional upon acceptance of the two-page abstract and payment of the presenting author's fee for the Conference during the advance period. Only one presentation per registration is allowed.

The Conference Proceedings will be available on a USB- stick containing the two-page abstracts. After the Conference, selected authors will be invited to submit a full paper, for inclusion in a special issue of an international journal or in another publication of international relevance.

Submission of contributions and Conference registration should be performed electronically via the Conference web site.

For further information, please contact the Conference Secretariat or visit the Conference website: <http://iccm2017.unisalento.it>.

### LOCATION

The Conference will take place at a location within the historical center of the town.

### SOCIAL PROGRAM

A social program will be arranged, including a reception and a banquet at a local place of interest.

### ACCOMMODATION

Block reservations at preference rates have been arranged. For detailed information see the Conference website.

### SUPPORTING ORGANIZATIONS

- ECCOMAS;
- Università del Salento, Italy;
- Department of Innovation Engineering, Università del Salento, Italy;
- Leibniz University of Hannover, Germany;
- Graduate School MUSIC, Hannover, Germany;
- Italian Association of Theoretical and Applied Mechanics (AIMETA);
- Italian Group of Computational Mechanics (GIMC);
- German Association for Computational Mechanics;
- Puglia Region;
- Province of Lecce;
- City of Lecce.

### THE UNIVERSITY OF SALENTO

With 6 Faculties, 8 Departments and 22 Research Centers, the University of Salento has grown remarkably in the last decades, playing its leading role in the local cultural system. With its main location in Lecce and two more in Brindisi, and Arnesano (few kilometers from downtown), the University buildings and structures are a patrimony for the entire Salento, where tradition meets innovation and rootedness opens to contemporaneity.

Visiting the University of Salento is a pleasant journey among old buildings, cloisters and monasteries (like the Convento degli Olivetani, seat of the Rectorate), and very modern buildings (like the Engineering Department Building) which represent the icons of technology and research.

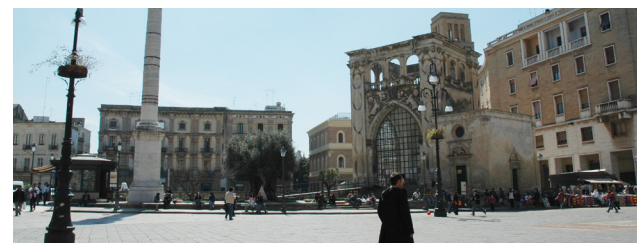
### THE CITY OF LECCE

Lecce is a historic city of about 100,000 inhabitants in southern Italy. It is the main city of the Salentine Peninsula, a sub-peninsula at the heel of the Italian Peninsula. With over 2,000 years of history it is one of the most important cities of Apulia.

The province of Lecce has become very popular for tourism, since you can find beautiful landscapes, clear sea with sandy and rocky beaches, historic monuments, good food and relaxed life.

Because of the rich Baroque architectural monuments found in the city, Lecce is commonly nicknamed "The Florence of the South". The city also has a long traditional affinity with Greek culture going back to its foundation; the Messapii who founded the city are said to have been Cretans in Greek records. To this day, in the Grecia Salentina, a group of towns not far from Lecce, the griko language is still spoken.

In terms of industry the "Lecce stone" is the city's main export, because it is very soft and malleable, thus suitable for sculptures. Lecce stone is a kind of limestone. Lecce is also an important agricultural centre, chiefly for its olive oil and wine production, as well as an industrial centre specialising in ceramic production.



## AN ECCOMAS THEMATIC CONFERENCE

ICCCM 2017 is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS). With its 5th edition, the Conference is now a reference point for scientists working in the field of Computational Contact Mechanics.

ECCOMAS thematic conferences deal with state-of-the-art topics in computational science and engineering. The successful story of ECCOMAS Thematic Conferences started in 2005 and continued year over year. More than 30 Thematic Conferences will be organized in 2017. Their enormous success expanded the visibility of ECCOMAS on a global scale and opened its frontiers to the rest of the world.

## OBJECTIVES

In the last years Computational contact mechanics has been a topic of broad interest and intense research. The main effort has been devoted to the development of robust solution schemes and new discretization techniques, which can be applied to different classes of contact problems.

The aim of the Conference is to provide an international forum for researchers, practitioners and for all who are concerned with modern computational techniques and applications in the field of contact mechanics.

The participants will have the opportunity to discuss recent advances and to identify future research directions in the field. Sessions related to specific topics will be introduced by a keynote lecture in the field.

## CONFERENCE TOPICS

The topics of interest are wide ranging. They include:

- Adhesion and debonding;
- Constraints enforcement methods;
- Contact at the nanoscales;
- Contact constitutive laws;
- Contact detection algorithms;
- Contact in bio-mechanics;
- Delamination, fracture and failure processes;
- Discrete element methods for contact;
- Discretization techniques;
- Friction and wear;
- Multi-field problems with contact constraints;
- Multi-scale approaches;
- Rolling contact;
- Solution algorithms and numerical efficiency.

## CONFERENCE ORGANIZERS



**Giorgio Zavarise**  
(Chairman), University of Salento, Italy



**Peter Wriggers**  
(Co-Chairman), Leibniz Universität Hannover, Germany

## LOCAL ORGANIZING COMMITTEE

- M. Campiti** University of Salento, Italy  
**M.L. De Bellis** University of Salento, Italy  
**R. Dimitri** University of Salento, Italy

## INTERNATIONAL SCIENTIFIC COMMITTEE

- A. Almqvist** Luleå University of Technology, Sweden  
**P. Alart** Laboratoire de Mécanique et de Génie Civil CNRS, Montpellier, France  
**O. Allix** LMT, ENS Cachan, Uni. Paris-Saclay, France  
**Z. Dostal** Technical University Ostrava, Czech Republic  
**D. Durville** Centrale Supélec - Université Paris-Saclay, France  
**P. Eberhard** University of Stuttgart, Germany  
**T. Laursen** Khalifa University, Abu Dhabi, UAE  
**P. Litewka** Poznan University of Technology, Poland  
**R. Krause** Institute of Computational Science, USI, Lugano, Switzerland  
**J.F. Molinari** Ecole Polytechnique Fédérale de Lausanne, Switzerland  
**U. Nackenhorst** Leibniz Universität Hannover, Germany  
**E. Oñate** CIMNE, Technical University Catalonia, Barcelona, Spain  
**D.R.J. Owen** University of Wales - Swansea, UK  
**M. Puso** Lawrence Livermore National Laboratory, USA  
**M. Raous** Laboratoire de Mécanique et d'Acoustique CNRS, Marseille, France  
**J. Rojek** Polish Academy of Sciences, Poland  
**E. Sacco** University of Cassino and Southern Lazio, Italy  
**D. Sheng** University of Newcastle, Australia  
**G.E. Stavroulakis** Technical University of Crete, Chania, Greece  
**S. Stupkiewicz** Institute of Fundamental Technological Research (IPPT), Poland  
**R.L. Taylor** University of California, Berkeley, USA  
**B. Wohlmuth** Technische Universität München, Germany  
**T. Zohdi** University of California, Berkeley, USA



## REGISTRATION FEES

The registration fees, with early registration applicable if received before April 15, 2017, are:

	Early	Late
<b>Delegates</b>	490 €	590 €
<b>Students</b>	300 €	350 €

ECCOMAS members will have a 5% reduction on the delegates fee

The Conference fee includes:

- Conference proceedings;
- Attendance at all scientific sessions;
- Coffee breaks and reception;
- Conference banquet (only for delegates).

## IMPORTANT DATES

Deadline for abstract submission	1 March 2017
Acceptance of contributions for oral presentation	15 March 2017
Deadline for early payment	15 April 2017

## CONFERENCE SECRETARIAT

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