

ICCCM 2023

7th International Conference on Computational Contact Mechanics

5-7 July 2023, Torino - Italy



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: iccm2023.polito.it.

LOCATION

The Conference will take place at the Politecnico di Torino – Corso Duca degli Abruzzi 24.

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;
- Politecnico di Torino, Italy;
- Department of Structural, Geotechnical and Building Engineering;
- Università del Salento, Italy;
- Department of Mathematics and Physics "Ennio De Giorgi";
- Universität der Bundeswehr München, Germany;
- Technologieforschung der Bundeswehr.



POLITECNICO DI TORINO

The Regio Politecnico di Torino (Royal Turin Polytechnic) was founded as institution in 1906, but its origins go back further. It was preceded by the Scuola di Applicazione per gli Ingegneri (Technical School for Engineers) founded in 1859 after the Casati Act, and by the Museo Industriale Italiano (Italian Industry Museum) founded in 1862 under the aegis of the Italian Ministry of Agriculture, Trade and Industry. The first one, born in the University context, showed the way of research and higher education to technical studies. The second one addressed more directly to the situation of a country that was about to begin a new industrial era. Famous scholars and researchers, authorities in different subjects with characters to match, gave a decree to new subjects such as Electrotechnics and Building Science. They were the first to have a vision of founding a school which dealt with the needs of people and society. In 1859 Valentino Castle (Castello del Valentino) was given to the Technical School for Engineers, nowadays Politecnico di Torino, which owns the Castle. Following the model of the most famous European Polytechnic Schools, at the beginning of the 20th Century the Regio Politecnico di Torino moved in different directions. It began to contact both the European scientific world and the local and national industries. Aeronautics was born and in the new laboratories, from Chemistry to Architecture, young people, who came to Turin from all over Italy, were building their professional future in a lively and creative atmosphere. In November 1958 the big complex in Corso Duca degli Abruzzi was opened and it expanded thanks to the enlargement of the Cittadella Politecnica, a campus where classrooms, laboratories, education, research, and services to the town coexist. The Politecnico di Torino, which in 2009 celebrated its 150th academic year from its foundation, has become over the years an international school, where traditions and future, past and modernity are all interlinked.



AN ECCOMAS THEMATIC CONFERENCE

ICCCM 2023 is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS). With its 7th 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), Politecnico di Torino, Italy

Alexander Popp

(Co-Chairman), Universität der Bundeswehr München, Germany

SCIENTIFIC SECRETARY

Mauro Corrado Politecnico di Torino, Italy

ORGANIZING COMMITTEE

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Chieti - Pescara, Italy

Stefano Invernizzi Politecnico di Torino, Italy

Alessio Rubino Politecnico di Torino, Italy

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M. Tur Universitat Politècnica de València, España

P.Wriggers Leibniz Universität Hannover, Germany

V. Yastrebov MINES Paris, PSL University, CNRS, France



REGISTRATION FEES

The registration fees, with early registration applicable if received before April 30, 2023, are:

| Payment | Early | Late |
|--|-------|-------|
| Delegates | 490 € | 590 € |
| Students | 300 € | 350 € |
| Accompanying persons | 0 € | 0 € |
| Banquet for students and accompanying persons | 60 € | 60 € |

The Conference fee includes:

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

IMPORTANT DATES

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|--|-------------------|
| Online registration start | September 1, 2022 |
| Submission deadline for the two-pages abstract | March 10, 2023 |
| Acceptance of contributions notification for oral presentation | March 31, 2023 |
| Early registration fee deadline (read more) | April 30, 2023 |
| Payment deadline for abstract acceptance and presentation scheduling | May 31, 2023 |

CONFERENCE SECRETARIAT

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