





# International Conference on Complex and Differential Geometry

#### **DESCRIPTION:**

The aim of this conference is to fuel the interaction between researchers in different aspects of Real and Complex Differential Geometry. To this end, the meeting will include wide-ranging talks and more focused seminars by experienced specialist and young researchers, integrated by informal discussions and problem sessions.

#### **MORE DETAILS:**

In recent years, we have witnessed striking new developments in Differential and Complex Geometry, while some fundamental questions remain still open. These fields are evolving rapidly as indicated by the recent breakthroughs on Poincare' conjecture and the existence of Kaehler-Einstein metrics on Fano varieties. One of the themes of this international conference is the search for special Hermitian metrics especially motivated by problems in Geometry and Topology and by Theoretical Physics models. The existence problem for constant scalar curvature metrics, the existence of holomorphic structures on the six-dimensional sphere, the complete classification of compact complex surfaces in class VII, and the classification of gravitational instantons are just a few examples of problems of current interest.

#### **TOPICS:**

- Special Hermitian metrics
- Gravitational instantons and metrics of constant scalar curvature
- 4-dimensional geometry and topology
- Almost-complex and symplectic structures
- Geometric flows techniques

#### **SPEAKERS:**

The University of Adelaide, Australia

V. Apostolo\

Université du Québec à Montréal, Canada

Institut Fourier, Université Grenoble Alpes, Francia

Institut de mathématiques de Jussieu, Francia

R. Bryant Duke University, USA

X. Chen

University of Science and Technology of China, Cina

C. Cifarelli

Stony Brook University, USA

A. Dranishnikov University of Florida, USA

P. Gaudchon École Polytechnique, Francia

G. Grantcharov

Florida International University, USA U. Hamenstädt

University of Bonn, Germania





University of Münster, Germania

University of Angers, Francia

Aarhus University, Danimarca T. Ozuch-Meersseman

University of Roma La Sapienza, Italia

King's College London, Regno Unito

California Institute of Technology (Caltech), USA

University of Münster, Germania

Zhejiang University, Cina

New York University, USA

C. Tonnesen-Friedman

Union College, USA

N. ISCRACI

A. Otiman

A. Sambusetti

S. Salamon

B. Santoro

A. Song

S. Sun

V. Tosatti







25 - 29 May 2026



Trieste, Italy



Deadline:

**31 January 2026** 

## **DIRECTORS:**

C. Arezzo, ICTP, Italy L. F. Di Cerbo, University of Florida, USA A. Fino, Università di Torino, Italy M. Pontecorvo, Università di Roma 3, Italy

## LOCAL ORGANISER:

C. Arezzo, ICTP, Italy

# **GRANTS:**

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

**FURTHER INFORMATION:** 



Web: https://indico.ictp.it/event/11144/

E-mail: smr4218@ictp.it

Female scientists are encouraged to apply.







The conference is intended as an appreciation of the scientific contributions of

Claude LeBrun and organized in partnership with the Clay Mathematics Institute.

