



Physics and Geometry of F-theory 2017

27 February - 2 March 2017

Miramare, Trieste, Italy



picture by Davide Nardon

The goal of this conference is to bring together the experts in the field of F-theory from around the globe, both from the physics and the mathematics community, in order to exchange ideas about recent progress and future endeavours. F-theory is a non-perturbative realisation of string theory that is written in the language of algebraic geometry, and has always benefitted greatly from interdisciplinary interactions such as this conference

TOPICS:

- Phenomenological aspects of F-theory particle physics, including Grand Unification, proton decay, selection rules, Yukawa couplings
- Analysis of effective theories arising from F-theory compactifications to various dimensions



IN COLLABORATION WITH THE





ITALIAN INSTITUTE FOR NUCLEAR PHYSICS

INTERNATIONAL SOLVAY INSTITUTES

ORGANIZERS:

A. Collinucci (U. Libre de Bruxelles) S. Giacomelli (ICTP) **R. Valandro** (U. of Trieste)

SPEAKERS INCLUDE:

- L. Anderson (Virginia Tech)
- A. Braun (Oxford U.)
- M. Del Zotto (SUNY, Stony Brook)
- I. García-Etxebarria (MPI Munich)
- A. Grassi (U. of Pennsylvania)
- J. Gray (Virginia Tech)
- T. Grimm (Utrecht U.)
- J. Halverson (Northeastern U.)
- H. Hayashi (Tokai U.)
- J. Heckman * (UNC Chapel Hill)
- D. Klevers (CERN)
- F. Marchesano (IFT Madrid)
- D. Morrison (UC Santa Barbara)
- E. Palti (Heidelberg U.)
- R. Savelli (IFT Madrid)
- Dualities to other string theories
- New mathematical advances including geometrical aspects of elliptic fibrations, Matrix Factorisation, resolution of singular manifolds, Calabi-Yau four-folds and five-folds.

GRANTS:

A limited number of grants are available to support the travel and living expenses of selected participants, with priority given to participants working in a developing country and who are at the early stages of their career.

HOW TO APPLY FOR PARTICIPATION:

The application form can be accessed at activity website: <u>http://indico.ictp.it/event/7951</u>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

CONFERENCE SECRETARIAT:

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S. Schäfer-Nameki (Oxford U.) A. Tomasiello (Milano Bicocca U.) W. Taylor (MIT) C. Vafa * (Harvard U.) T. Weigand (Heidelberg U.) (* = to be confirmed)

DEADLINE for requesting participation **4 January 2017**



October 2016