New Pathways in Explorations of Quantum Field Theory and Quantum Gravity Beyond Supersymmetry - II

15 - 26 June 2020
Trieste, Italy

Further information:
http://indico.ictp.it/event/9099/
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The workshop will cover novel methods developed to understand non-perturbative phenomena in quantum field theory and quantum gravity, in the non-supersymmetric realm.

Description:

The topics include the formulation of non-perturbative dualities in QFT and their application in condensed matter systems; the study of symmetries and their anomalies, including the most modern incarnations, and the constraints they put on the non-perturbative dynamics; the investigation of quantum information theoretic methods and their interplay with QFT concepts like causality, entanglement entropy, and so forth; the analysis of aspects of the swampland, through the application of string theory to phenomenological and cosmological problems. The topics will be spread over two weeks of the workshop roughly according to the order they are listed. Each day there will be 1-2 long talks and possibly a discussion session. Most of the talks will include a pedagogical overview of the subject. There will be ample time left for discussion and the initiation of new collaborations.

Topics:

- Dynamics of non-supersymmetric QFTs
- Generalized symmetries and their anomalies
- Quantum information in QFT and quantum gravity
- Swampland conjectures and quantum gravity

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How to apply:

Online application:
http://indico.ictp.it/event/9099/

Female scientists are encouraged to apply.

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.

Deadline:

15 April 2020

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