

## Preface

The XXIV International Workshop "High Energy Physics and Quantum Field Theory" (QFTHEP2019) was held in Sochi, Russia, from September 22 to 29, 2019. The 2019 edition of the workshop was organized jointly by the D.V.Skobeltsyn Institute of Nuclear Physics of the M.V.Lomonosov State University (SINP MSU) and the Southern Federal University.

QFTHEP2019 continued the series of workshops started by SINP MSU in 1985 and aimed at putting together theoreticians and experimentalists for discussing topics of current interest and providing a stimulating environment for exchanging ideas on new developments in high energy physics and research programs for future colliders.

QFTHEP2019 covered a wide range of topics in the modern theoretical and experimental high-energy physics, with the main emphasis on

- Higgs boson studies, searches for new physics and other experimental results from the LHC
- Physics prospects at linear and circular  $e^+e^-$  colliders and super B-factories
- Extensions of the Standard Model and their phenomenological consequences at the LHC and future colliders
- Higher order corrections and resummations for collider phenomenology
- Automatic calculations and Monte Carlo simulations in high energy physics
- Collider physics connections to astroparticle/cosmology
- Modern nuclear physics and relativistic nucleus-nucleus collisions
- Detectors for future experiments in high energy physics

About 120 researchers (with a traditionally large number of PhD students and young scientists) participated in the workshop.

On behalf of the Organizing Committee, we have pleasure to thank all participants for their lively scientific discussions and for creating the exciting atmosphere of this event. The contributions presented in this volume reflect the scientific content of QFTHEP 2019.

We look forward to seeing all participants at the next edition of QFTHEP in 2021!

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