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Preface

The 2022 edition of **QCD@Work - International Workshop on Quantum Chromodynamics - Theory and Experiment** was held in the auditorium of Museo Provinciale “Sigismondo Castromediano” in Lecce, Italy, from 27 to 30 June 2022. It was the 10th edition of a series started in 2001 in Martina Franca and continued in Conversano (2003 and 2005), Martina Franca (2007, 2010 and 2016), Lecce (2012), Giovinazzo (2014) and Matera (2018). The 2022 edition was one of the first in-person scientific events of the year, after the difficult period of the Covid-19 pandemic which obliged the cancellation of the 2020 edition.

This edition was dedicated to Prof. Sheldon Stone, who served in the International Scientific Advisory Committee in all the editions of the workshop and sadly passed away on October 2021.

The aim of this workshop is to bring together senior and young researchers, theorists and experimentalists putting QCD to work in different frameworks, for discussions, dissemination of the results, promotion of new collaborations, education of the young scientists. The main topics discussed in this edition were:

- low energy and non-perturbative aspects of QCD
- progress in perturbative QCD
- physics of heavy quarks
- QCD in extreme conditions of baryon density and temperature
- new holographic methods for strong interactions.

About 80 researchers (with a large fraction of young scientists) actively participated with presentations and discussions. There was a lively poster session: the prize for the best poster was awarded to Dr. Savvas Pitsinigkos (Southampton).

In this volume we collect the outcome of the meeting.

We acknowledge the institutions and individuals who have contributed to the successful realization of the event: Istituto Nazionale di Fisica Nucleare (INFN), Commissione Scientifica Nazionale Teorica INFN, Bari INFN Theory Group for financial support, and Prof. Daniele Martello and Dr. Vito Manzari, Directors of the INFN units of Lecce and Bari. We thank Dr. Luigi De Luca, Director of Museo Provinciale “Sigismondo Castromediano” and of Polo Biblio-Museale di Lecce, Provincia di Lecce and Regione Puglia for granting the use of the auditorium. We are grateful to Ing. Andrea Colitta and Dr. Marcella Nuzzo for kind assistance at the museum. We thank the staff of Motus Animi in Lecce, in particular Drs. Federica Di Benedetto, Federica Golia, Valentina Rainò and Ulrico Viganotti, for the on-site organization. We are grateful to Drs. Francesca Assisi and Enrico Fasanelli, of Bari and Lecce INFN units, for administrative and technical assistance.

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