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Preface

The 2024 edition of **QCD@Work - International Workshop on Quantum Chromodynamics - Theory and Experiment** was held in Trani, Italy, from 18 to 21 June 2024. The venue was the magnificent Palazzo Delle Arti Beltrani. It was the 11th edition of a series started in 2001 in Martina Franca and continued in Conversano (2003 and 2005), Martina Franca (2007, 2010, 2016), Lecce (2012, 2022), Giovinazzo (2014) and Matera (2018).

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.

This edition was the occasion to commemorate two eminent Italian QCD scientists, Stefano Catani and Marcello Ciafaloni, who sadly passed away in 2023.

About 80 researchers (with a large fraction of young scientists) actively participated with presentations and discussions. There was a lively poster session: the prizes for the best posters were awarded to Drs. Maimona Razzaq (Cosenza) and Akash Sing (IISER Mohali).

In this volume we publish the workshop proceedings.

We acknowledge the Institutions and individuals who have contributed to the successful realization of the event. For financial support we thank Istituto Nazionale di Fisica Nucleare (INFN), Commissione Scientifica Nazionale Teorica INFN, Groups I and IV of INFN-Bari, Sezione INFN and Groups I, IV - Lecce, Dipartimento di Matematica e Fisica “Ennio De Giorgi” of Unisalento. We thank Dr. Vito Manzari and Prof. Daniele Martello, Directors of the Bari and Lecce INFN Units. We thank Dr. Niki Battaglia and the Trani “Associazione delle Arti”, who manage Palazzo Delle Arti Beltrani. We are particularly grateful to Dr. Mary Lonigro and the staff of Intermeeting Sud for the great help and kindness in the organization of the meeting and in the assistance to participants. We thank all young people of Locanda Del Giullare - Trani, for the warm hospitality and cheerfulness. We acknowledge the help of Dr. Francesca Assisi and of the staff of INFN Bari administration service. Finally, we thank Prof. Francesco Pepe for having allowed us to use two of his pictures of Trani as logos of the workshop.

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