

# Conference

## ELECTROWEAK, STRONG AND NEW INTERACTIONS

26 SEPTEMBER 2022

The symposium will cover the current status and future prospects of electroweak and strong interactions phenomenology and of new physics searches. In particular, talks will cover recent progress in lattice QCD and QED, in perturbative QCD, in current and future collider physics, in direct and indirect new physics searches, and in the development of extensions of the Standard Model

### AGENDA

#### 09:00 welcome addresses

Roberto Antonelli (Presidente dell'Accademia Nazionale dei Lincei)

Shaharam Rahatlou (Direttore del Dipartimento di fisica, Sapienza università di Roma)

Andrea Romanino (Direttore della SISSA)

#### 09:30 Giorgio Parisi (Presidente della Classe di Scienze FMN dell'Accademia Nazionale dei Lincei): *Guido and high energy QCD*

#### 10.00 Luciano Maiani (Linceo): *Weak interactions in lattice QCD with Guido*

### 11:00-13:00: QCD and Collider Physics

R. Keith Ellis (IPPP, Durham): *50 years of lepton pair production*

Giovanni Ridolfi (Istituto Nazionale di Fisica Nucleare): *Sudakov resummation: an overview*

Laura Reina (Florida State University): *From flavor to top, Higgs, and beyond*

Antonio Gonzalez-Arroyo (Madrid): *Guido and The Matrix*

### 14:00-14:30: QCD and Collider Physics (II)

Massimo D'Elia (Istituto Nazionale di Fisica Nucleare): *Theta dependence in QCD*

### 14:30-16:00: Physics Beyond the Standard Model

Antonio Masiero (Istituto Nazionale di Fisica Nucleare): *The old and the new muon g-2 puzzle*

Giovanni Villadoro (ICTP): *Axion Physics*

Fabio Zwirner (Padova): *Another look at hierarchies*

### 16:00-16:30: Precision Flavour Physics (I)

Christopher Sachrajda (University of Southampton): *36 Years of Lattice QCD with Guido - From 15 quenched configurations to Precision Flavour Physics*

### 17:00-18:30: Precision Flavour Physics (II)

Damir Becirevic (LPT, Université Paris Sud and CNRS): *From Lattice QCD to Phenomenology: Nonperturbative Renormalization*

Achille Stocchi (LAL - Université Paris Sud and IN2p3/CNRS): *Guido: a flavourful life*

Andrzej Buras (TUM-IAS): *Precision Flavour Physics*

### 18:30-19:30: Free Recollections

ROMA - PALAZZO CORSINI - VIA DELLA LUNGARA, 10

Registration Form: <https://agenda.infn.it/event/31881/registrations/3222/>