

Mainz Institute for Theoretical Physics

SCIENTIFIC PROGRAMS

The Future of Fundamental Composite Dynamics: Colliders, Cosmology and Tools

Giacomo Cacciapaglia **IP2I Lyon**, Thomas Flacke **KIAS**, Abhishek Iyer **IIT Delhi** and Werner Porod **Univ. of Würzburg**,
March 4 – 15, 2024

Theory Facing Experiment on the Dark Matter and Flavor Puzzles

Marcela Carena **FNAL & Univ. of Chicago**, Gino Isidori **Univ. of Zurich**, Matthias Neubert **JGU Mainz**, and Giulia Ricciardi **Univ. of Naples Federico II**
June 10 – 21, 2024 Anacapri, Italy

Energy Correlators at the Collider Frontier

Carlota Andres Casas **Ecole Polytechnique**, Jack Holguin **Ecole Polytechnique**, Aditya Pathak **DESY**, and Massimiliano Procura **Univ. of Vienna**
July 8 – 19, 2024

Effective Theories for Nonperturbative Physics

Sebastian Schenk **JGU Mainz**, Carlos Tamarit **JGU Mainz**, and Felix Yu **JGU Mainz**
August 5 – 16, 2024

The Dark Matter Landscape: From Feeble to Strong Interactions

Mathias Becker **JGU Mainz**, Julia Harz **JGU Mainz**, Laura Lopez Honorez **Univ. Libre de Bruxelles**, Tracy Slatyer **Massachusetts Institute of Technology**, and Juri Smirnov **Univ. of Liverpool**
August 26 – September 13, 2024

Next Generation Perturbative QCD for Hadron Structure: Preparing for the Electron-Ion Collider

Taushif Ahmed **Univ. Regensburg**, Mathias Butenschön **Univ. Hamburg**, Alexey Vladimirov **Univ. Complutense Madrid**, and Pia Zurita **Univ. Regensburg**
October 21 – 31, 2024

Open Questions and Future Directions in Flavour Physics

Marzia Bordone **CERN**, Claudia Cornella **JGU Mainz**, and Joseph Davighi **Univ. of Zurich**
November 4 – 15, 2024

TOPICAL WORKSHOPS

Modular Invariance Approach to the Lepton and Quark Flavour Problems: from Bottom-up to Top-down

Mu-Chun Chen **Univ. of California, Irvine** Ferruccio Feruglio **INFN-Padova**, Hans Hans Peter Nilles **Univ. of Bonn** and Serguey Petcov **INFN/SISSA-Trieste**
May 13 – 17, 2024

The Evaluation of the Leading Hadronic Contribution to the Muon g-2: Consolidation of the MUonE Experiment and Recent Developments in Low-Energy $e^+ e^-$ Data

Carlo M. Carloni Calame **INFN, Pavia**, Massimo Passera **INFN-Padova**, Luca Trentadue **Univ. di Parma**, and Graziano Venanzoni **Univ. of Liverpool & INFN-Pisa**
June 19 – 23, 2024

Geometry and Symmetries of SCFTs

Antoine Bourget **IphT Saclay**, Julius Grimminger **Oxford Univ.**, Amihay Hanany **Imperial College London**, Vishnu Jejjala **Univ. of the Witwatersrand**, and Hans Jockers **JGU Mainz**
June 17 – 21, 2024

Uncertainty Quantification in Nuclear Physics

Weiguang Jiang **JGU Mainz**, Joanna Sobczyk **JGU Mainz**, Christian Drischler **Ohio Univ.**, and Takayuki Miyagi **TU Darmstadt**
June 24 – 28, 2024

Isospin-Breaking Effects on Precision Observables in Lattice QCD

Thomas Blum **UConn**, Marina Marinkovic **ETH Zurich**, Harvey B. Meyer **JGU Mainz**, and Hartmut Wittig **JGU Mainz**
July 22 – 26, 2024

Towards the Detection of Diffuse Supernova Neutrinos: What Will We See? What Can We Learn?

Shunsaku Horiuchi **Virginia Tech**, Yu-Feng Li **IHEP Beijing**, Irene Tamborra **Niels Bohr Institute, Copenhagen**, Mark Vagins **Univ. of Tokyo**, and Michael Wurm **JGU Mainz**
September 16 – 20, 2024

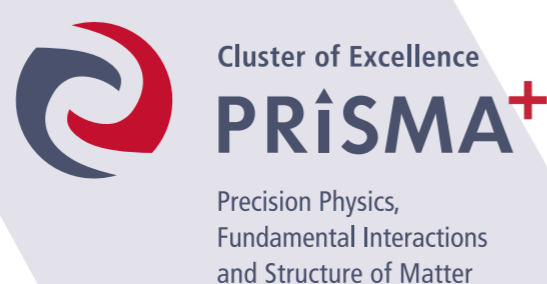
MITP SUMMER SCHOOL

Crosslinks of Early Universe Cosmology

Julia Harz **JGU Mainz**, Carlos Tamarit **JGU Mainz**, and Felix Yu **JGU Mainz**
July 15 – August 2, 2024

ACTIVITIES 2024

www.mitp.uni-mainz.de



Mainz Institute for Theoretical Physics
 PRISMA+ Cluster of Excellence
 Johannes Gutenberg-Universität Mainz, Germany