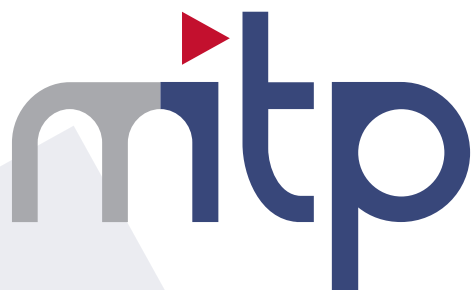




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Mainz Institute for Theoretical Physics

ACTIVITIES 2021

www.mtp.uni-mainz.de

SCIENTIFIC PROGRAMS

- Power Expansions on the Lightcone: From Theory to Phenomenology**
CANCELLED DUE TO COVID-19 **February 16-26, 2021**
- Gravity and Emergent Gauge Fields in Condensed and Synthetic Matter**
CONVERTED TO VIRTUAL WORKSHOP **April 12-23, 2021**
- Flavour of BSM Physics in the LHC Era**
CANCELLED DUE TO COVID-19 **April 26-May 7, 2021**
- Towards the Next Fundamental Scale of Nature: New Approaches in Particle Physics and Cosmology**
CANCELLED DUE TO COVID-19 **May 10-21, 2021**
- Mega Dark Matter: Theory and Detection**
CANCELLED DUE TO COVID-19 **May 25-June 4, 2021**
- Neutrinos, Flavour and Beyond**
POSTPONED TO 2022 **June 7-18, 2021, Capri, Italy**
- Machine Learning for Particle Physics**
CONVERTED TO VIRTUAL WORKSHOP **June 21-July 2, 2021**
- Positive Geometries in Scattering Amplitudes and Beyond**
CONVERTED TO VIRTUAL WORKSHOP **July 7-18, 2021**
- Probing new Physics with Gravitational Waves**
CANCELLED DUE TO COVID-19 **July 26-August 13, 2021**
- Dark Sector Theory Confronts Reality**
CANCELLED DUE TO COVID-19 **August 30-Sept. 10, 2021**
- Mathematical Foundations of the Swampland Program**
CANCELLED DUE TO COVID-19 **Sept. 13-24, 2021**
- Quantum Field Theory at the Boundary**
CONVERTED TO VIRTUAL WORKSHOP **Sept. 27 - 30, 2021**
- Light New Physics: From Table-Top Experiments to the LHC**
November 29 - December 10, 2021

TOPICAL WORKSHOPS

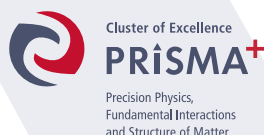
- Quantum Methods for Lattice Gauge Theories**
CANCELLED DUE TO COVID-19 **February 2-4, 2021**
- Evaluation of the Leading Hadronic Contribution to the Muon $g-2$: Toward the MUonE Experiment**
CANCELLED DUE TO COVID-19 **March 30-April 3, 2021**
- Machine Learning Techniques in Lattice QCD**
CONVERTED TO VIRTUAL WORKSHOP **April 6-10, 2021**
- Precision Tests with Neutral-Current Coherent Interactions with Nuclei**
CANCELLED DUE TO COVID-19 **June 7-11, 2021**
- Elliptic Integrals in Fundamental Physics**
CANCELLED DUE TO COVID-19 **June 14-18, 2021**

MITP SUMMER SCHOOL

- The Amplitude Games**
CONVERTED TO VIRTUAL SCHOOL **July 12-30, 2021**
- Summer School on Particle Physics in São Paulo**
POSTPONED TO 2022 **September 13-24, 2021**

VIRTUAL WORKSHOPS

- Gravity and Emergent Gauge Fields in Condensed and Synthetic Matter**
April 12-23, 2021
- Machine Learning Techniques in Lattice QCD**
May 24-28, 2021
- Machine Learning for Particle Physics**
June 21-July 2, 2021
- Positive Geometries in Scattering Amplitudes and Beyond**
July 7-18, 2021
- The Amplitude Games**
July 12-30, 2021
- Quantum Field Theory at the Boundary**
September 27 - 30, 2021



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