

MITP
SUMMER
SCHOOL

13–24 July 2026

Topics in Theoretical and Mathematical Physics



An Introduction to Vertex Operator Algebras
Ioana Coman | IPMU

**Renormalization group methods in
Quantum Gravity**
Renata Ferrero | FAU Erlangen-Nürnberg

Arithmetic in Mathematical Physics
Pyry Kuusela | Sorbonne Université

**Anomalies in Quantum Field Theory
and String Theory**
Ruben Minasian | CEA-Saclay

**Mathematical Aspects of
Conformal Field Theories**
Sven Möller | Maynooth University

**Machine Learning in Quantum
Field Theory and String Theory**
Fabian Rühle | Northeastern University

**Anomalies and Generalized
Symmetries**
Sakura Schäfer-Nameki |
University of Oxford

The Swampland program
Irene Valenzuela | CERN

Special Lecturers
Jens Eberhardt | JGU Mainz
Manfred Lehn | JGU Mainz
Ferdinand Schmidt-Kaler | JGU Mainz

Organized by

► Hans Jocker | JGU Mainz ► Felix Yu | JGU Mainz ► Ida Zadeh | University of Southampton

<https://indico.mitp.uni-mainz.de/event/450/>

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