

MITP Summer School 2018: Towards the Next Quantum Field Theory of Nature



Sunday 15 July 2018 - Friday 3 August 2018

Mainz

Scientific Programme

The Mainz Institute for Theoretical Physics will host a summer school for Ph.D. students in theoretical physics. Attendance will be limited to 50 students, who will be hosted at the Erbacher Hof in downtown Mainz. The theme for the third summer school is "Towards the Next Quantum Field Theory of Nature," which spans a broad scope of open questions in high energy physics and the theoretical tools needed for progress. Lecture topics will range from supersymmetric field theories and the naturalness problem to effective field theories and precision QCD, and from gravitational waves and early universe phase transitions to the Standard Model and Higgs physics.

The lecture schedule will be complemented by discussion sessions/tutorials and social activities to encourage networking and a vivid exchange of ideas. Applicants should be in the later stages of their Ph.D. career and are expected to commit to the full three week program.