

**MP 6 Quantengravitation 1**

Zeit: Mittwoch 17:00–18:30

Raum: HG2-HS4

MP 6.1 Mi 17:00 HG2-HS4

**Loop Quantum Gravity** — •THOMAS THIEMANN — Albert Einstein Institut

Loop Quantum Gravity is a background independent and non-perturbative approach to combining the principles of General Relativity and Quantum Mechanics. We describe the status of the field in a pedagogical manner.

MP 6.2 Mi 17:30 HG2-HS4

**Semiclassical Analysis of the Master Constraint for Loop Quantum Gravity** — •KRISTINA GIESEL and THOMAS THIEMANN — Albert Einstein Institut

The quantum dynamics of Loop Quantum Gravity can be encoded in the so called Master Constraint. In this talk we analyse its semiclassical properties.

MP 6.3 Mi 18:00 HG2-HS4

**Quantum Cosmological Perturbation Theory** — •STEFAN HOFMANN — Perimeter Institute for Theoretical Physics

Within a minisuperspace truncation of Loop Quantum Gravity we derive the deviations from scale invariance in the CMBR.