



Einladung zum Vortrag

Observables in Table-Top Quantum Gravity

anlässlich des Habilitationsverfahrens
für das Fach „Theoretische Physik“

von

Dr. Marios Christodoulou

Institute for Quantum Optics and Quantum Information,
Austrian Academy of Sciences, Vienna

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Ort: Ernst-Mach-Hörsaal, Boltzmannngasse 5, 2. OG

Abstract:

Quantum superpositions of near-classical spacetimes likely represent the regime of quantum gravity most accessible to empirical investigation within our lifetimes. Yet, the theoretical implications of the proposed experimental protocols remain difficult to articulate with precision. I argue that so-called “tabletop quantum gravity” experiments will reveal the quantum indefiniteness of the geometrical invariants that characterize spacetime. This claim foregrounds a central lesson of general relativity: in the absence of a fixed spacetime background, physical observables cannot be defined locally.