



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Classical space-time from on-shell amplitudes (Zoom Seminar)

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Date: October 26, 2020

Time: 10:00 am IST

Zoom link shall be shared separately



The interplay between quantum scattering amplitudes and classical observables has brought new insights into the nature of classical solutions of gravity. In particular, it is shown that observables associated with black-holes, such as gravitational potential, deflection angle, impulse, can be readily recovered from amplitudes generated by minimal coupling. This "minimal coupling/black hole correspondence" will be discussed across all known four-dimensional block hole-like solutions, from Reissner-Nordstrom, to Kerr Taub-NUT. We will propose the dynamic principle behind such correspondence in terms of minimal entanglement.