



Department of
Theoretical Physics

The Quantum Space-Time Seminar

An On-Shell Derivation of the Soft Effective Action

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Date and time: Nov 26, Tuesday (11 am)
Venue: A 304

The zoom link will be sent separately.



We derive the soft effective action in $d+2$ -dimensional abelian gauge theories from the on-shell action obeying Neumann boundary conditions at timelike and null infinity and Dirichlet boundary conditions at spatial infinity. This allows us to identify the on-shell degrees of freedom on the boundary with the soft modes living on the celestial sphere. Following the work of Donnelly and Wall, this suggests that we can interpret soft modes as entanglement edge modes on the celestial sphere and study entanglement properties of soft modes in abelian gauge theories.