TEP Seminar

UCLA

Tuesday, November 18th @ 2pm
Schwinger Lounge

"Scattering Amplitudes for Hawking Radiation with the Double Copy"

Matteo Sergola (UCLA)

Abstract: In this talk I will outline how we can obtain the Hawking spectrum by exponentiating a series of Feynman diagrams describing a scalar field scattering through a collapse background. This approach is rooted in semiclassical methods of scattering amplitudes which have recently been developed for application to gravitational-wave physics. Finally, I will comment on an analogous electromagnetic scattering problem which is obtained via the double copy duality between gauge theory and gravity.