

Resurgence and Non-Perturbative Physics

Thursday, December 20, 2018 9:50 AM (20 minutes)

Divergent perturbation series are prevalent in all of physics. Notable examples include sums of Feynman diagrams in QFT and sums over Riemann surfaces in string scattering. I will first give a brief introduction to Resurgence theory, starting with ways of summing divergent series which will lead us to Borel summation and then looking at the analytic continuation of the path integrals which will lead us to Resurgence theory. Time permitting I will then discuss Resurgence in the context of $\mathcal{N} = (2, 2)$ on the 2-sphere using results from SUSY Localization.

Primary author: GLASS, Philip (Durham University)

Presenter: GLASS, Philip (Durham University)