



Contribution ID: 400

Type: **not specified**

The Breakdown of the Narrow Width Approximation and other Aspects of Timeline Processes in AdS

Working in a slice of AdS truncated by branes, it's well known that the propagator contains a tower of poles which correspond to narrow particles—KK modes. Does this picture of “a tower of narrow modes” hold to arbitrarily high energies when interactions are present? Generically these narrow modes will get a finite width which can grow with KK number, possibly becoming as large as the mass gap between the modes. What happens when these resonances overlap and mix at high energies, and could this have implications for timelike processes? In my talk, I will address these questions and share some insights that we have gained in the pursuit of answers.

Primary authors: COSTANTINO, Alexandria; FICHET, sylvain; TANEDO, Flip (UC Riverside)

Presenter: COSTANTINO, Alexandria

Session Classification: New Developments in Quantum Field Theory

Track Classification: New Developments in Quantum Field Theory