

Regge trajectories for $N=(2,0)$ superconformal field theories

Friday, September 3, 2021 4:30 PM (1 hour)

We discuss the structure of Regge trajectories of 6d $N=(2,0)$ SCFTs combining analyticity in spin with supersymmetry. Focusing on the four-point function of supermultiplet we show how “analyticity in spin” holds for all spins greater than -3 . Through the Lorentzian inversion formula we then describe an iterative procedure to “bootstrap” this four-point function starting from protected data, and compare the results with the numerical bootstrap bounds. This procedure works best at large but finite central charge, where non-protected contributions are suppressed by the inversion formula.

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