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## Application of Conformal Field Theory to High Energy Scattering and Principal Series

we discuss differences and similarities between CFT correlators in Euclidean and Minkowski treatments. As a concrete illustration, we discuss CFT correlators via  $\{it\}$  principal series representation for non-compact Lie groups by focussing on 1-d CFT, and in particular, discuss SYK-like models. Euclidean correlators can be expanded in OPE in terms of an infinite set of conformal primaries, with dimensions  $\Delta_n = h_n = 2\delta_0 + 2n + 1 + \gamma_n$ . In addition, there is a special contribution from a term which saturates to the chaos bound, with  $\Delta_0 = 2$ . The same theory can equivalent be organized in terms of an infinite set of Regge trajectories, with a leading graviton trajectory” with intercept  $j_0 = 2$ . In addition, there exists an infinite set of lower trajectories with intercept  $j_n = -2\delta_0 - 2n - 1 + \epsilon_n$ . These two representations are dual” for 1-d CFT, and can be considered as a “contraction” of  $\Delta - j$  curve from CFT initially defined at  $1 < d$ .

### Additional comments

**Primary authors:** Prof. BROWER, Richard; Dr RABEN, Tmothy; Prof. TAN, Chung-I

**Presenter:** Prof. TAN, Chung-I