

Analyticity Properties of Scattering Amplitude in Higher Dimensional Field Theories

Friday 6 July 2018 09:30 (30 minutes)

I consider analyticity properties of scattering amplitude in higher dimensional field theories in the framework of LSZ Axiomatic field theory. I prove existence of the Lehmann-Martin ellipse and prove generalized Jost-Lehmann-Dyson theorem to achieve this goal. Here the basis for partial wave expansion is Gegenbauer polynomial. I also prove analog of the Froissart-Martin bound for such theories.
J. Maharana, J. Math. Phys. (1917)

Author: Prof. MAHARANA, Jnanadeva (Institute of Physics, Bhubaneswar)

Presenter: Prof. MAHARANA, Jnanadeva (Institute of Physics, Bhubaneswar)

Session Classification: Formal Theory Development

Track Classification: Formal Theory Development