## Light Cone 2015



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## Solving the inhomogeneous Bethe-Salpeter Equation in Minkowski space

Tuesday, 22 September 2015 14:30 (30 minutes)

The inhomogeneous Bethe-Salpeter Equation for an interacting system, composed by two massive scalars exchanging a massive scalar, is numerically investigated in ladder approximation, directly in Minkowski space, by using an approach based on the Nakanishi integral representation. In this contribution, the results obtained for the scattering lengths and phase-shifts will be presented and compared with the analogous quantities recently obtained within a totally different framework. Moreover, a highly non trivial issue related to the abrupt change in the width of the support of the Nakanishi weight function, when the zero-energy limit is approached, will be discussed.

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