The complex structure of strong interactions in Euclidean and Minkowski space

Contribution ID: 12

Type: Invited talk

Exploring three-point functions in the complex plane

Thursday 29 May 2025 14:15 (45 minutes)

In the calculation of bound state properties, models for interactions play a crucial role in identifying underlying mechanisms and also in obtaining quantitative results. Their construction is typically not only guided by symmetries but also by the complexity one can computationally handle when using them in bound state and related equations. In this context, one advantage of models is that their analytic structure is known. When, on the other hand, the corresponding elementary correlation functions are calculated from their own equations, their analytic structure is more difficult to assess with limited possibilities to influence it. In this talk, I will illustrate the obstacles of this approach for three-point functions of Yang-Mills theory which are essential ingredients in the calculation of glueballs.

Author:HUBER, Markus (Giessen University, Germany)Presenter:HUBER, Markus (Giessen University, Germany)Session Classification:Talks