Contribution ID: 26 Type: Talks

## A 3-body formalism for determining the nature of X(3872)

Wednesday 10 December 2025 15:00 (30 minutes)

S-matrix theory is one of the most powerful framework to study the unstable states that populate QCD spectrum. In particular, it is very useful to extract physical properties of the "exotics" candidates - particles that cannot be described by ordinary quark model - in a non perturbative, phenomenological way. In this talk, I will introduce some 3-body formalisms we are developing to determine the nature of the tetraquark candidate X(3872) in the S-matrix context: are the long-range interaction mediated by pions enough strong to bind it?

**Author:** FOTI, Giorgio (University of Messina & INFN Catania)

Presenter: FOTI, Giorgio (University of Messina & INFN Catania)

Session Classification: Phenomenology