**DPF - PHENO 2024** 



Contribution ID: 735

Type: not specified

## Scalar scattering amplitudes: zero loci, factorization, and the double copy

Tuesday 14 May 2024 17:15 (15 minutes)

We demonstrate how the scattering amplitudes of some scalar theories, scaffolded general relativity, multiflavor DBI, and the special Galileon, vanish at multiple loci in momentum space that include and extend their soft-limit behaviors. We elucidate the factorization of the amplitudes near the zero loci into lower point amplitudes. We explain how the occurrence of the zero loci in these theories can be understood in terms of the double copy formalism.

## Mini Symposia (Invited Talks Only)

Author: TER VELDHUIS, Tonnis

Co-authors: ROEST, Diederik (University of Groningen); LI, Yang (University of Groningen)

**Presenter:** TER VELDHUIS, Tonnis

Session Classification: Quantum Field & String Theory

Track Classification: Quantum Field & String Theory