

## Bologna Workshop on:



CFT AND INTEGRABLE MODELS

and their applications from gauge/gravity dualities to statistical mechanics and quantum information

Contribution ID: 328 Type: Poster

## Multipoint correlation functions in the Sinh-Gordon 1+1d QFT

Tuesday 2 September 2025 14:00 (30 minutes)

The S-matrix bootstrap program offers a unique possibility to compute explicitly the form factors of local operators in integrable quantum field theories. We shall build on those results so as to compute, in terms of explicit series of multiple integrals, the multipoint correlation functions in the Sinh-Gordon 1+1 dimensional quantum field theory, which is a simple case where the S-matrix is scalar and there is only one kind of particle. In particular, our expressions allow us to explicitly check the causalty principle on the level of the correlation functions. This is a joint work with K. Kozlowski.

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