

# Whispers from the Dark Universe - Particles & Fields in the Gravitational Wave Era

CLUSTER OF EXCELLENCE  
QUANTUM UNIVERSE

DESY THEORY WORKSHOP

## WHISPERS FROM THE DARK UNIVERSE – PARTICLES & FIELDS IN THE GRAVITATIONAL WAVE ERA

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24 - 27 September 2024 DESY Hamburg, Germany



Contribution ID: 106

Type: **not specified**

## Lining up a Positive Semi-Definite Six-Point Bootstrap

*Thursday 26 September 2024 14:17 (17 minutes)*

Recently, we initiated a positive semi-definite numerical bootstrap program for multi-point correlators. Considering six-point functions of operators on a line we reformulated the crossing symmetry equation for a pair of comb-channel expansions as a semi-definite programming problem. Through a combination of analytical and numerical techniques we obtained rigorous bounds on CFT data in the triple-twist channel for several examples.

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**Session Classification:** Parallel Thursday Strings & Mathematical Physics 1

**Track Classification:** Strings & Mathematical Physics