## **Synergies Towards the Future Standard Model**

CLUSTER OF EXCELLENCE
QUANTUM UNIVERSE

**DESY THEORY WORKSHOP** 

## SYNERGIES TOWARDS THE FUTURE STANDARD MODEL

HELMHOLTZ

23 - 26 September 2025 DESY Hamburg, Germany



Contribution ID: 116

Type: not specified

## Derivation of Super-Leading Logarithms in t-tbar Production

Wednesday 24 September 2025 14:00 (15 minutes)

So far the appearance of super-leading logarithms in hadron-hadron collisions was only studied for massless states. We extend the formalism to include massive final states and derive the anomalous dimension. We find the presence of an additional phase and discuss its physical significance and the difference to the massless case.

**Primary authors:** SCHOLZE, Josua (JGU Mainz); Mr KÖNIG, Matthias (JGU Mainz); NEUBERT, Matthias (Johannes Gutenberg University of Mainz); GRÜNHOFER, Romy (Johannes Gutenberg-Universität Mainz); BANER-JEE, Upalaparna (Johannes Gutenberg University of Mainz); LI, Yibei (Johannes Gutenberg-University Mainz)

Presenter: SCHOLZE, Josua (JGU Mainz)

Session Classification: Parallel Sessions Wednesday Pheno 1

Track Classification: Particle Phenomenology