Particle Physics Faculty of Physics Boltzmanngasse 5 1090 Vienna, Austria



INVITATION

as part of the Particle Physics Seminar

to the talk by

Max JAARSMA

(University of Amsterdam)

on

"The full range energy-energy correlator in tracks"

Abstract:

Energy correlators are a class of observables that probe correlations between the energies of final state particles. Over the past few years these observables have gained a lot of attention due the fact that they are relatively easy to extract from experiment and can be predicted from theory with high precision. To probe energy correlations at very small angles, high precision angular measurements on the experimental side are required. Track-based measurements are ideal for this, as the angular resolution of tracking systems are superior compared to that of calorimeters. Using the track function formalism, we predict the shape of the energy-energy correlator at NLO. Moreover, we zoom in on both the collinear and back-to-back limit, where large logarithms spoil the perturbative expansion and resummation is required.

Time: Tuesday, 3 December 2024, 4:15 p.m.

Location: Erwin-Schrödinger Lecture Hall, 1090 Vienna, Boltzmanngasse 5, 5th floor

Join Zoom Meeting - Meeting ID: 933 4269 3866 Passcode: 185096 https://univienna.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVBQT09

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