Particle Physics Faculty of Physics Boltzmanngasse 5 1090 Vienna, Austria



INVITATION

as part of the Particle Physics Seminar

to the talk by

Mikael CHALA

(University of Granada)

on

"The renormalization of the Standard Model effective field theory"

Abstract:

I will discuss the recent progress towards renormalizing the Standard Model effective field theory to order (v/f)^4, with v being the electroweak scale and f the new physics threshold, that we have made using diagrammatic techniques off-shell. I will also discuss the interplay with amplitude methods and positivity bounds. Likewise, I will elaborate on how we have dealt with difficulties such as removing (unphysical) interactions that vanish upon using appropriate field redefinitions.

Based on: 2106.05291, 2205.03301, 2409.15408.

Time: Tuesday, 4 March 2025, 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