



INVITATION

as part of the Particle Physics Seminar

to the talk by

Mikael CHALA
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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, Boltzmannngasse 5, 5th floor

Join Zoom Meeting - Meeting ID: 933 4269 3866 Passcode: 185096
<https://univiennea.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVBT09>

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