

Matheus Martines de Azevedo da Silva

Journée des nouveaux entrants du Pôle Théorie



Where I am from



Where I am from



My studies



University of São Paulo (USP):

1. Bachelor degree (2016 - 2020)
2. Master's degree (2020 - 2022)
3. PhD (2022 - now)

Supervisors:

Oscar Éboli (USP) and Olcyr Sumensari (IJCLab)



Since 2024



IJCLab:

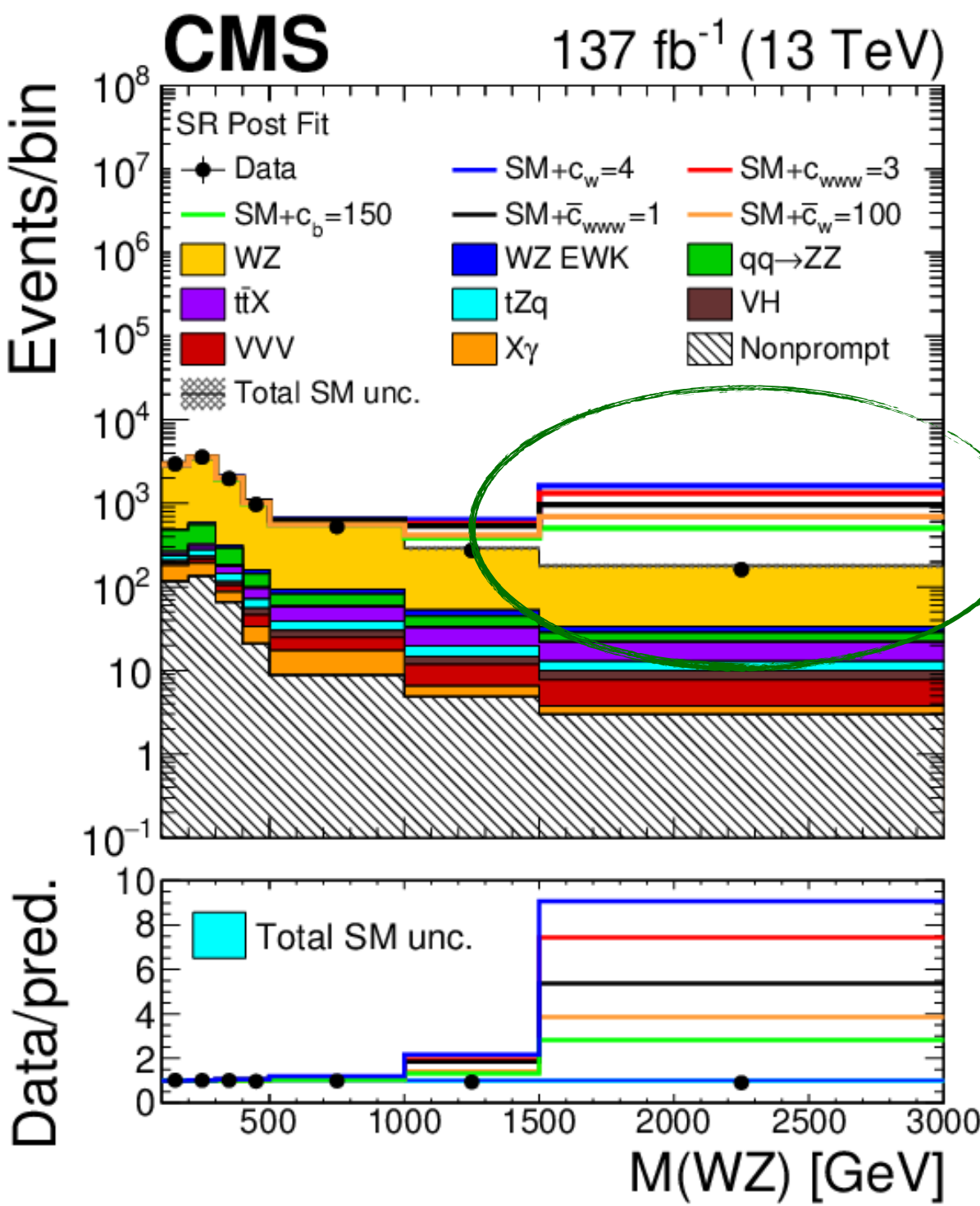
1. Research Internship Abroad (out/2024 - set/2025)

Supervisor:

Olcyr Sumensari (IJCLab)

My research

Application of Effective Field Theories (EFTs) for the interpretation of LHC data.

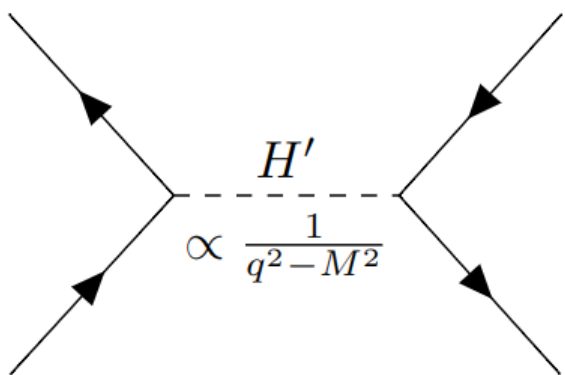


JHEP 07 (2022) 032

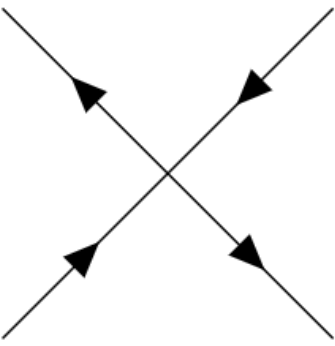
If new physics is **heavy**, deviations from the SM predictions in the tail of distributions can occur.

EFT is a tool to parametrize possible deviations in a **model-independent way**.

Effects are capture by local interactions

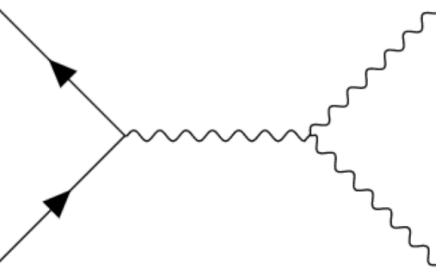


$$M^2 \gg q^2$$

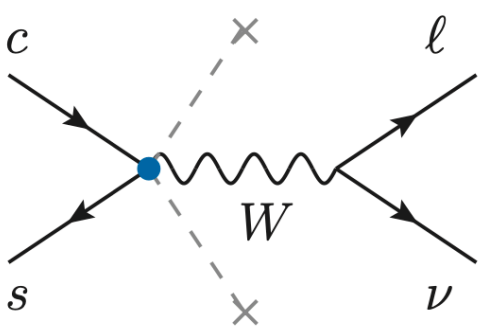
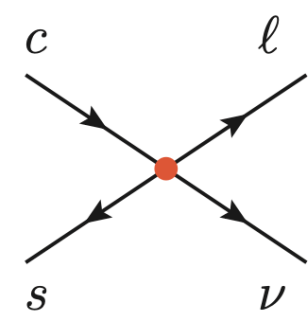


$$\mathcal{L}^{(d)} = \sum_i \frac{f_i^{(d)}}{\Lambda^{d-4}} \mathcal{O}_i^{(d)}$$

Main works with
1. Di-boson production data.



2. Drell-Yan



Hobbies



Merci beaucoup!