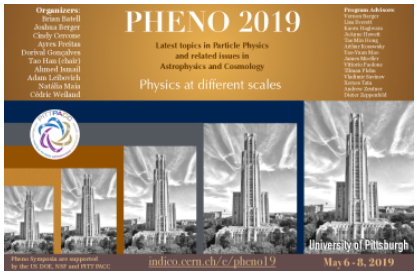

Contribution ID: **683** Type: **parallel talk**

Four-Fermi Interactions in the Standard Model Effective Theory

Monday 6 May 2019 15:00 (15 minutes)

Standard Model Effective Theory (SMEFT) is a powerful tool to constrain new physics in a rather model-independent way. A lot of work has been done to constrain the army of dimension-six operators at next-to-leading order but a rather important subset - four-fermi operators - has been neglected so far. We derive and put into perspective the bounds from the W-polarization fractions associated with top quark decay and Z decay partial widths as well as the weak mixing angle. On the technical side we work out the often neglected subtleties when treating chiral interactions in dimensional regularization.

Summary

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