

Seesaw Effective Field Theories at One-loop Level

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Neutrino physics has entered into the precision era. The unprecedented accuracy in the experimental measurement necessitates reliable theoretical predictions at the loop level. In order to confront neutrino mass models at high-energy scales with low-energy precision data, we accomplish a complete one-loop matching of canonical seesaw models onto the Standard Model Effective Field Theories and derive the Wilson coefficients of all dimension-six operators. Together with the relevant renormalization-group equations, this provides a self-consistent theoretical framework to carry out one-loop calculations of low-energy observables and test neutrino mass models.

Poster prize

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