LoopFest XX



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GRIFFIN: a library for electroweak radiative corrections in 4-fermion processes

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The new precision frontier laid out by future e+e- colliders requires higher-order electroweak and mixed EW-QCD radiative corrections of electroweak precision observables(EWPOs) defined at Z-resonance. It has also long been considered that a manifestly gauge invariant theoretical set-up of the scattering in the vicinity of the resonance is a must to incorporate higher-order corrections from any model. We thus introduce a new C++ library GRIFFIN (Gauge-invariant Resonance In Four-Fermion Interactions) out of such necessity. In this talk, we will show the framework set up, class structure, and sample results of this library in comparison with predecessors such as ZFITTER.

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