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Participants :

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Other collaborators :

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Precise or analytic evaluation of multi-loop Feynman graphs mainly through Differential Equations

- Multi-scale: 2-loop sunrise and other self-mass graphs relevant for EW model,
  - Fully analytic calculations:
    - at special values $p^2 = 0, \infty$, threshold, pseudo-thresholds
    - high-precision high-order expansions by the recurrence relations from the DE
  - Numeric: direct numerical solution of DE through 4-th order Runge-Kutta method

- Few-scale: up to 4-loop, static quantities ($g - 2$, vac-pol); 1-scale sunrise and tad-poles