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High-precision calculation of the 4-loop contribution to the electron $g-2$ in QED

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In this talk I will describe the results of evaluation up to 1100 digits of precision of the mass-independent contribution of the 891 4-loop Feynman diagrams contributing to the electron $g-2$ in QED.

I will show the analytical expressions fitted to the high-precision values, which contain polylogarithms of sixth-root of unity and one-dimensional integrals of products of complete elliptic integrals.

I will discuss also some technical aspects of my program SYS used to perform all the calculations.

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