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$e^+e^- \to \gamma\gamma^*$ at two loops in massless QED

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We present an analytic computation of $e^+e^- \to \gamma\gamma^*$ at two loops in massless QED. We reconstruct the analytic form of the amplitudes from numerical evaluations over finite fields. We express the integrals in a basis of Goncharov polylogarithms to obtain compact expressions. These contributions are required for N^{3}LO predictions of the inclusive process $e^+e^- \to \gamma^*$ and for NNLO corrections for ISR measurements of $e^+e^- \to \gamma\gamma^*$.

Presenter: MOODIE, Ryan (Turin University)

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