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Calculating four-loop massless propagators with Forcer

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We present Forcer, a new FORM program for the calculation of four-loop massless propagators. The basic framework is similar to that of the Mincer program for three-loop massless propagators: the program reduces Feynman integrals to a set of master integrals in a parametric way.

To overcome an ineludible complexity of the program structure at the four-loop level, most of the code was automatically generated or made with computer-assisted derivations. Correctness of the program has been checked with the recomputation of some quantities in the literature. Finally we show a number of new results.

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