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Calculation of One Loop Integrals with Package-X and CollierLink

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Package-X is a Mathematica package for analytically computing and symbolically manipulating dimensionally regulated one-loop Feynman integrals, and CollierLink is an upcoming interface to the COLLIER library. In this talk, I will review new features in the upcoming release of Package-X: calculation of cut discontinuities, and command-line readiness. Additionally, features of CollierLink will be discussed: numerical evaluation of Passarino-Veltman functions using the COLLIER library from Mathematica, and automatic code generation and compilation of functions for rapid evaluation of loop integrals. Time permitting, I will emphasize the importance of user friendliness of public packages.

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