

‘DarkPACK’: A modular software to compute BSM squared amplitudes for particle physics and dark matter observables

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DarkPACK is a software that automatically generates a numerical library of scattering amplitudes from the Lagrangian density of the model, to compute dark matter observables such as relic density. It relies on MARTY and SuperIso relic and is written in C++. In the current version, DarkPACK can easily generate all the squared amplitudes of 2 NP particles into 2 Standard Model particles at leading order. Thanks to its modularity, it is easy to link it with other software and to extend its features.

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