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STR: a Mathematica package for the method of uniqueness

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The Mathematica package STR (Star-Triangle Relations) is a recently developed tool designed to solve Feynman diagrams by means of the method of uniqueness in any (Euclidean) spacetime dimension D . The method of uniqueness is a powerful technique to solve multi-loop Feynman integrals in theories with conformal symmetry imposing some relations between D and the powers of propagators. In our algorithm we include both identities for scalar and Yukawa type integrals. The package is equipped with a graphical environment in which is possible to draw the desired diagram with the mouse input and a set of tools to modify and compute it. Throughout the use of a graphic interface, the package should be easily accessible to users with little or no previous experience on diagrams computation.

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