In this article, an efficient unitary-based method is developed for the analytic computation of double-cut integrals in one-loop scattering amplitudes of massless particles. In particular, coefficients of one-loop 2-point functions are obtained in a simple form by use of Stokes' theorem. This work is partly motivated by recent developments in the computation of tree-level amplitudes in the spinor-momenta formalism and especially by the derivation of a tree-level recursion relation introduced in [1].

References

[1] R. Britto, F. Cachazo, B. Feng and E. Witten, Phys. Rev. Lett. **94**, 181602 (2005) [arXiv:hep-th/0501052].