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Landau Singularities from Whitney Stratifications

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I will demonstrate that the complete and non-redundant set of Landau singularities of Feynman integrals may be explicitly obtained from the Whitney stratification of a certain map. As a proof of concept, I leverage recent theoretical and algorithmic advances in their computation in order to determine this set for nontrivial examples of two-loop integrals. Interestingly, different strata of the Whitney stratification describe not only the singularities of a given integral, but also those of integrals obtained from kinematic limits, e.g. by setting some of its masses or momenta to zero.

Summary

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