

We give a review of the advancements in the computation of scattering amplitudes in gauge theories, for application to collider physics. Hoping to convey a comprehensive picture, instead of giving rather technical, and sometimes tedious details, we point out the major achievements in the field in some sort of chronological order, emphasising on some of the methods and necessarily skipping others. What ought to be clear from the talk is the inadequacy of Feynman rules for the task of evaluating tree as well as loop amplitudes as the number of both external and internal particles increases.