

IR subtraction schemes

Friday, February 26, 2010 2:00 PM (30 minutes)

To compute jet cross sections at higher orders in QCD efficiently one has to deal with infrared divergences. These divergences cancel out between virtual and real corrections once the phase space integrals are performed. To use standard numerical integration methods like Monte Carlo the divergences' cancellation must be performed explicitly. Usually this is done constructing appropriate counterterms which are integrated over the unresolved region of the phase space. We will show some new approaches to the infrared subtraction techniques for computing NNLO jet cross sections in QCD and the future possible phenomenological applications.

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Session Classification: Friday, 26 February - Methodology of Computations in Theoretical Physics

Track Classification: Methodology of Computations in Theoretical Physics