

## QCD vs. MC: Drell-Yan $p_T$ distribution

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The parton shower algorithms sums up large logarithms. In general we can say that they are able to sum up the leading logarithmic contributions almost for all important quantities but we have less confidence when we want to say something about the next-to-leading logarithmic contributions. In this talk I will discuss a strategy how to validate parton shower algorithms against some know analytic result. I will focus on the Drell-Yan  $p_T$  distribution since this is one of the most important non-trivial observable what can test the initial state shower in the Monte Carlo programs and it can provide some guidelines how to define modified leading order parton distribution functions for general purpose event generation.

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