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## The Resonance Aware POWHEG Method

*Wednesday 18 December 2024 14:30 (10 minutes)*

In this talk I will start by introducing the POWHEG method for matching fixed order calculations to a parton shower. I will show how the double counting is removed by POWHEG. Then I will go on to look at an extension to this which is resonance aware, POWHEG-RES. This extension to POWHEG adds the complexity of the matching algorithm keeping track of the productions channels associated with a given final state. I aim to show why this method improves the accuracy of the matching algorithm and is necessary in future precision computations.

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