MC@NLO

$$\frac{d\sigma_{\text{MC@NLO}}}{dO} = \left[d\Phi_B (B + V + \int d\Phi_{(+1)} MC) \right] I_{\text{MC}}^{(n)}(O) +$$
$$\left[d\Phi_B d\Phi_{(+1)} \left(R - MC \right) \right] I_{\text{MC}}^{(n+1)}(O).$$

- MC depends on the Monte Carlo one is interfacing the NLO computation to.
- Aim is to have all Monte Carlos of the HERWIG and PYTHIA families automatically interfaced.

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- ▶ Completely checked and validated.
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HERWIG++
- Completely checked and validated.
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- Just need a final check from generation to plots (trivial).

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PYTHIA6(Q)

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- ▶ Needs validation phase (accelerated if MadAnalysis could handle negative weights).

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- ▶ Needs interface to be able to output hepmc files (quick).
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PYTHIA6(PT)

- ▶ Should be very quick for ISR.
- ▶ For FSR needs some action from the Pythia side.

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- PYTHIA6(PT): depends on the needs. In principle quicker than PYTHIA8.
- In parallel: output one les houches file for all showers.