

- Multi-parton matrix elements Monte Carlos (**ALPGEN**, **HELAC**, **MADEVENT**, **SHERPA**...) matched with vetoed Parton Showers
(not treated in these lectures)
- NLO calculations for $W, Z \rightarrow \bar{l}l'$ (**DYRAD**, **MCFM**)
W.T. Giele, E.W.N. Glover and D.A. Kosower, Nucl. Phys. **B403** (1993) 633
J.M. Campbell and R.K. Ellis, Phys. Rev. **D65** (2002) 113007
- soft-gluon resummation of leading/NLL (p_{\perp}^V/M_V) (**ResBos**)
C. Balazs and C.P. Yuan, Phys. Rev. **D56** (1997) 5558
- fully differential NNLO corrections to W/Z production (**FEWZ**, **DYNNLO**)
K. Melnikov and F. Petriello, Phys. Rev. Lett. **96** (2006) 231803, Phys. Rev. **D74** (2006) 114017
S. Catani, L. Cieri, G. Ferrera, D. de Florian, M. Grazzini, Phys. Rev. Lett. **103** (2009) 082001
S. Catani, G. Ferrera, M. Grazzini, JHEP **1005** (2010) 006
- NNLL resummation of W/Z transverse momentum
G. Bozzi, S. Catani, G. Ferrera, D. de Florian, M. Grazzini, Phys. Lett. **B696** (2011) 207
- NLO merged with Parton Showers (**MC@NLO**, **POWHEG**, **SHERPA**)
S. Frixione and B.R. Webber, JHEP **0206** (2002) 029
P. Nason, JHEP **0411** (2004) 040; S. Alioli et al., JHEP **0807** (2008) 060, JHEP **1006** (2010) 043
S. Höche, F. Krauss, M. Schönherr, F. Siegert, arXiv:1207.5030