A simple prescription to address this problem

- **Generate partonflevel configurations** for a given hard"parton multiplicity N_{part}, with partons constrained by
  - $p_T > p_{T\,min}$ $\Delta R_{jj} > R_{min}$
- **Perform the jet showering**, using the default Herwig/Pythia algorithms
- Process the showered event "before hadronization" with a **cone jet algorithm,** de" ned by
  - $E_{T\,min}$ and R_{jet}
- **Match partons and jets:**
  - for each hard parton, select the jet with min $\Delta R_{j\text{-}parton}$
  - if $\Delta R_{j\text{-}parton} < R_{jet}$ the parton is "matched"
  - a jet can only be matched to a single parton
  - **if all partons are matched, keep the event, else discard it**
- This prescription de" nes an **inclusive sample** of $\mathbf{N_{jet}=N_{part}}$ **jets**
- De" ne an **exclusive Nfjet** sample by requiring that the number of reconstructed showered jets $\mathbf{N_{jet}}$ be equal to $\mathbf{N_{part}}$