| Process       | Generator         |          | PDF set     |           | Tune   | Order  |
|---------------|-------------------|----------|-------------|-----------|--------|--------|
|               | $^{ m ME}$        | PS       | ME          | PS        | Tulle  | Order  |
| tt(qH) Signal | Powheg-Box        | Рутніа 8 | NNPDF30NLO  | NNPDF23LO | A14    | NLO    |
| tH Signal     | Madgraph5_aMC@NLO | Рутніа 8 | NNPDF30NLO  | NNPDF23LO | A14    | NLO    |
| W/Z+jets      | Sherpa 2.2.1      |          | NNPDF30NNLO |           | Sherpa | NLO/LO |
| $t\bar{t}$    | Powheg-Box        | Рутніа 8 | NNPDF30NLO  | NNPDF23LO | A14    | NLO    |
| Single top    | Powheg-Box        | Рутніа 8 | NNPDF30NLO  | NNPDF23LO | A14    | NLO    |
| $t\bar{t}X$   | Madgraph5_aMC@NLO | Рутніа 8 | NNPDF30NLO  | NNPDF23LO | A14    | NLO    |
| VH            | Powheg-Box        | Рутніа 8 | PDF4LHC15   | CTEQ6L1   | AZNLO  | NLO    |
| tH            | Madgraph5_aMC@NLO | Рутніа 8 | CT10PDF     |           | A14    | NLO    |
| Diboson       | Sherpa 2.2.1      |          | NNPDF30NNLO |           | Sherpa | NLO/LO |