$$N = \sigma_{\mathrm{tot}} \times \mathcal{L}_{\mathrm{int}} \times \sum_{(a,b)} P_{(a,b)} \times \sum_i \mathrm{BR}_{a\to i} \times \sum_j \mathrm{BR}_{b\to j} \times \min\left(A\epsilon_{a\to i}, A\epsilon_{b\to j}\right)$$

N	:	expected number of events
σ_{tot}	:	total cross section
$\mathcal{L}_{\mathrm{int}}$	:	integrated luminosity
$A\epsilon_{a\to i}$	:	acceptance times efficiency for SM events
$P_{(a,b)}$	:	(a,b)-production fraction
$\mathrm{BR}_{a\to i}$	:	branching fraction for a to decay into i