$$N = \sigma_{\rm tot} \times \mathcal{L}_{\rm int} \times \sum\nolimits_{\rm SM} A\epsilon_{a\to i} \times P_{(a,a)} \times {\rm BR}^2_{a\to i}$$

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