

MSSM analysis

Source of uncertainty	F_- (%)	F_+ (%)
$t\bar{t}$ and single-top-quark backgrounds normalization	-13	+11
$\tau_{\text{had-vis}}$ energy scale	- 3	+ 8
τ_{had} trigger	- 0.5	+10
Signal acceptance	- 6	+ 1.9
Jet-to- $\tau_{\text{had-vis}}$ fake rate ($\tau_{\text{lep}}\tau_{\text{had}}$)	- 1.5	+ 2.4
Multi-jet background ($\tau_{\text{had}}\tau_{\text{had}}$)	- 0.4	+ 0.3
$t\bar{t}$ background modelling	- 0.1	+ 1.0
Jet-to- $\tau_{\text{had-vis}}$ fake rate ($\tau_{\text{had}}\tau_{\text{had}}$)	- 0.2	+ 0.2
Jet-to-vertex association	- 0.1	+ 0.1
Statistics	-75	+65

 Z'_{SSM} analysis

Source of uncertainty	F_- (%)	F_+ (%)
$\tau_{\text{had-vis}}$ energy scale	-13	+ 5
Pile-up	- 0.015	+ 1.3
Z +jets backgrounds cross section and acceptance	- 0.3	+ 0.4
Signal PDF	- 0.3	+ 0.5
Jet-to- $\tau_{\text{had-vis}}$ fake rate ($\tau_{\text{had}}\tau_{\text{had}}$)	- 0.3	+ 0.3
$\tau_{\text{had-vis}}$ identification	- 0.19	+ 0.18
Luminosity	- 0.16	+ 0.15
$W \rightarrow \tau\nu$ +jets background reweighting ($\tau_{\text{had}}\tau_{\text{had}}$)	- 0.17	+ 0.10
Statistics	-85	+92