uncertainty source	$\Delta \sigma_{t-{ m ch.},t+ar{t}}/\sigma_{t-{ m ch.},t+ar{t}}^{ m obs}$	$\Delta \sigma_{t-{ m ch.},t}/\sigma_{t-{ m ch.},t}^{ m obs}$	$\Delta \sigma_{t-{ m ch.},ar{t}}/\sigma_{t-{ m ch.},ar{t}}^{ m obs}$
JES	$\pm 4.9\%$	±5.6%	±3.7%
JER	$\pm 0.7\%$	±0.2%	$\pm 1.5\%$
b-tagging efficiency	$\pm 2.3\%$	$\pm 2.1\%$	$\pm 1.6\%$
mis-tagging efficiency	$\pm 0.8\%$	$\pm 1.2\%$	$\pm 0.4\%$
lepton reconstruction/trigger	$\pm 2.5\%$	±2.0%	±2.9%