

138 fb<sup>-1</sup> (13 TeV)

**CMS**  
*Preliminary*

Spin- $\frac{1}{2}$   $t^*$

.....  $\sigma(pp \rightarrow t^* \bar{t}^*)$  prediction

95% CL upper limits

—●— Observed

-○- Median expected

■ 68% expected

■ 95% expected

