

(13 TeV)

**CMS**  
*Preliminary*  
 **$t\bar{t}$  simulation**

$p_T^{\text{jet}} > 20 \text{ GeV}$   
 $|\eta^{\text{jet}}| < 2.4$

**charm efficiency contours**

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| $\circ$ $\epsilon^c = 0.2$        | $\square$ $\epsilon^c = 0.25$      |
| $\triangle$ $\epsilon^c = 0.3$    | $\diamond$ $\epsilon^c = 0.35$     |
| $\oplus$ $\epsilon^c = 0.4$       | $\star$ $\epsilon^c = 0.45$        |
| $\nabla$ $\epsilon^c = 0.5$       | $\blacklozenge$ $\epsilon^c = 0.6$ |
| $+$ $\epsilon^c = 0.7$            | $\bullet$ $\epsilon^c = 0.8$       |
| $\blacksquare$ $\epsilon^c = 0.9$ |                                    |

