

$\mu$ 

negative ALP-SM interference ( $c_{\tilde{G}} c_{\tilde{\Phi}} > 0$ )

----- default: MET > 50 GeV,  $p_{\text{T}}^{\text{2nd AK4 jet}} > 30$  GeV

----- cut1: MET > 60 GeV,  $p_{\text{T}}^{\text{2nd AK4 jet}} > 40$  GeV

----- cut2: MET > 70 GeV,  $p_{\text{T}}^{\text{2nd AK4 jet}} > 40$  GeV

----- cut3: MET > 70 GeV,  $p_{\text{T}}^{\text{2nd AK4 jet}} > 50$  GeV

----- cut4: MET > 80 GeV,  $p_{\text{T}}^{\text{2nd AK4 jet}} > 50$  GeV

10

1

10<sup>-1</sup>

1

2

3

4

5

6

7

 $f_a$  [TeV]