\[\gamma a_3 \varphi \cos(\gamma \gamma a_3 f) -1\]

-2 \Delta \ln L

--- Observed, \( \phi_{\gamma \gamma}^a = 0 \) or \( \pi \)

--- Expected, \( \phi_{\gamma \gamma}^a = 0 \) or \( \pi \)

CMS

19.7 fb\(^{-1}\) (8 TeV) + 5.1 fb\(^{-1}\) (7 TeV)

\( f_{\gamma \gamma}^a \cos(\phi_{\gamma \gamma}^a) \)

68% CL

95% CL