CMS Preliminary  \( \int L \, dt = 19.2(\text{e})/19.3(\mu) \, \text{fb}^{-1} \, \sqrt{s}=8 \, \text{TeV} \)

- **BR\(_{new}^\text{obs} = 0.350 \, \text{GeV (obs)}**
- **BR\(_{new}^\text{exp} = 0.400 \, \text{GeV (exp)}**
- **BR\(_{new}^\text{obs} = 0.450 \, \text{GeV (obs)}**
- **BR\(_{new}^\text{exp} = 0.500 \, \text{GeV (exp)}**

Graph showing the relationship between BR\(_{new}^\text{obs} \) and \( C'^2 \) for different Higgs boson masses.