

Contribution ID: 17 Type: not specified

## Hadron production fraction ratios and his relationship with Search for new physics using B→μμ decays

Friday 12 May 2023 11:40 (30 minutes)

Rare B meson decays provide a sensitive probe for beyond standard model (BSM) effects. In this talk, some CMS measurements of rare B\_{s,d} meson properties will be discussed, including the branching fractions and effective lifetimes.

In addition, the fractions of Bu, Bd, and Bs mesons are denoted by fu, fd, and fs, respectively. Measurements of Bs branching fractions generally rely on ratios to Bu or B0 decay modes, which requires knowledge of fs/fu or fs/fd, respectively. In fact, we will discuss how measurements of the rare decay Bs $\rightarrow\mu\mu$ , are limited by the uncertainty in fs/fu.

Presenter: MEJIA GUISAO, Jhovanny Andres (Universidad de Antioquia (CO))