
ID contributo: **38** Tipo: **non specificato**

# Search for Bs0 ⟶ μ+μ− and B0 ⟶ μ+μ− decays with the CMS detector

The study of extremely rare or forbidden processes allows the indirect search of new physics through the comparison with the standard model expectations. The leptonic decays of Bs0 and B0 mesons are flavor-changing neutral currents processes highly suppressed in the Standard Model, with expected branching fractions of B(Bs0 ⟶ μ+μ−) = (3.2 ± 0.2) × 10−9 and B(B0 ⟶ μ+μ−) = (1.0 ± 0.1) × 10−10. These processes are highly sensitive to new physics, such as high tanβ minimal supersymmetric extension of the standard model or extended Higgs sectors. The results of the search for Bs0(B0) ⟶ μ+μ− decays by the CMS detector at LHC will be reported.

**Autore principale:** PAZZINI, JACOPO (PD)

**Relatore:** PAZZINI, JACOPO (PD)