

Document details

[< Back to results](#) | 1 of 1[Export](#) [Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More... >](#)[Full Text](#) [View at Publisher](#)Physical Review D
Volume 98, Issue 11, 1 December 2018, Article number 112011Angular analysis of the decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ in proton - proton collisions at $\sqrt{s} = 8$ TeV (Article) ([Open Access](#))Sirunyan, A.M.^a, Tumasyan, A.^a, Adam, W.^b, Ambrogi, F.^b, Asilar, E.^b, Bergauer, T.^b, Brandstetter, J.^b, Brondolin, E.^b, Dragicevic, M.^b, Erö, J.^b, Escalante Del Valle, A.^b, Flechl, M.^b, Frühwirth, R.^{b,gu}, Ghete, V.M.^b, Hrubec, J.^b, Jeitler, M.^{b,gu}, Krammer, N.^b, Krätschmer, I.^b, Liko, D.^b, Madlener, T.^b, Mikulec, I.^b, Rad, N.^b,View additional authors [v](#)^aYerevan Physics Institute, Yerevan, Armenia^bInstitut für Hochenergiephysik, Wien, Austria^cInstitute for Nuclear Problems, Minsk, BelarusView additional affiliations [v](#)

Abstract

[v View references \(39\)](#)

The angular distribution of the flavor-changing neutral current decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ is studied in proton - proton collisions at a center-of-mass energy of 8 TeV. The analysis is based on data collected with the CMS detector at the LHC, corresponding to an integrated luminosity of 20.5 fb⁻¹. The forward-backward asymmetry AFB of the dimuon system and the contribution FH from the pseudoscalar, scalar, and tensor amplitudes to the decay width are measured as a function of the dimuon mass squared. The measurements are consistent with the standard model expectations. © 2018 CERN.

SciVal Topic Prominence [i](#)

Topic: decay | standard model (particle physics) | Wilson coefficients

Prominence percentile: 99.320 [i](#)

ISSN: 24700010

Source Type: Journal

Original language: English

DOI: 10.1103/PhysRevD.98.112011

Document Type: Article

Publisher: American Physical Society

References (39)

[View in search results format >](#) All [Export](#) [Print](#) [E-mail](#) [Save to PDF](#) [Create bibliography](#)

- 1 Bobeth, C., Hiller, G., Piranishvili, G.
Angular distributions of $B \rightarrow K\ell\ell$ decays ([Open Access](#))
(2007) *Journal of High Energy Physics*, 2007 (12), art. no. 040. Cited 147 times.
doi: 10.1088/1126-6708/2007/12/040

[View at Publisher](#)Metrics [?](#)

0 Citations in Scopus

0 Field-Weighted
Citation ImpactPlumX Metrics [v](#)Usage, Captures, Mentions,
Social Media and Citations
beyond Scopus.

Cited by 0 documents

Inform me when this document
is cited in Scopus:[Set citation alert >](#)[Set citation feed >](#)

Related documents

Measurement of angular
parameters from the decay $B^0 \rightarrow K$
in proton-proton collisions at
 $\sqrt{s}=8$ TeVSirunyan, A.M. , Tumasyan, A. ,
Adam, W.
(2018) *Physics Letters, Section B:
Nuclear, Elementary Particle and
High-Energy Physics*Angular analysis of charged and
neutral $B \rightarrow K\mu^+\mu^-$ decaysAaij, R. , Adeva, B. , Adinolfi, M.
(2014) *Journal of High Energy
Physics*Differential branching fraction
and angular analysis of the $B^+ \rightarrow$
 $K^+\mu^+\mu^-$ decayAaij, R. , Beteta, C.A. , Adametz,
A.
(2013) *Journal of High Energy
Physics*View all related documents based
on references