

< Back to results | < Previous 2 of 29 Next >

Export Download Print E-mail Save to PDF Add to List More... >

Full Text View at Publisher

Physical Review D
Volume 99, Issue 3, 1 February 2019, Article number 032014

Search for pair production of second-generation leptoquarks at s =13 TeV (Article) (Open Access)

Sirunyan, A.M.^a, Tumasyan, A.^a, Adam, W.^b, Ambroggi, F.^b, Asilar, E.^b, Bergauer, T.^b, Brandstetter, J.^b, Dragicevic, M.^b, Erö, J.^b, Escalante Del Valle, A.^b, Flechl, M.^b, Frühwirth, R.^b, Ghete, V.M.^b, Hrubec, J.^b, Jeitler, M.^b, Krammer, N.^b, Krätschmer, I.^b, Liko, D.^b, Madlener, T.^b, Mikulec, I.^b, Rad, N.^b, Rohringer, H.^b,

View additional authors

^aYerevan Physics Institute, Yerevan, Armenia
^bInstitut für Hochenergiephysik, Wien, Austria
^cInstitute for Nuclear Problems, Minsk, Belarus

View additional affiliations

Abstract

View references (86)

A search for pair production of second-generation leptoquarks is performed using proton-proton collision data collected at s=13 TeV in 2016 with the CMS detector at the CERN LHC, corresponding to an integrated luminosity of 35.9 fb⁻¹. Final states with two muons and two jets, or with one muon, two jets, and missing transverse momentum are considered. Second-generation scalar leptoquarks with masses less than 1530(1285) GeV are excluded for β=1.0(0.5), where β is the branching fraction for the decay of a leptoquark to a charged lepton and a quark. The results of the search are also interpreted as limits on the pair production of long-lived top squarks in an R-parity violating supersymmetry model that has a final state with two muons and two jets. These limits represent the most stringent limits to date on these models. © 2019 CERN., for the CMS Collaboration. Published by the American Physical Society under the terms of the https://creativecommons.org/licenses/by/4.0/ Creative Commons Attribution 4.0 International license. Further distribution of this work must maintain attribution to the author(s) and the published article's title, journal citation, and DOI. Funded by SCOAP³.

SciVal Topic Prominence

Topic: jets | production | parton shower

Prominence percentile: 99.875

ISSN: 24700010
Source Type: Journal
Original language: English

DOI: 10.1103/PhysRevD.99.032014
Document Type: Article
Publisher: American Physical Society

References (86)

View in search results format >

All Export Print E-mail Save to PDF Create bibliography

View all 86 references

Metrics

0 Citations in Scopus
0 Field-Weighted Citation Impact

PlumX Metrics

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

Search for pair production of first and second generation leptoquarks in proton-proton collisions at s =8 TeV

Khachatryan, V. , Sirunyan, A.M. , Tumasyan, A.
(2016) *Physical Review D*

Search for a singly produced third-generation scalar leptoquark decaying to a τ lepton and a bottom quark in proton-proton collisions at √s=13 TeV

Sirunyan, A.M. , Tumasyan, A. , Adam, W.
(2018) *Journal of High Energy Physics*

Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at s =13 TeV

Sirunyan, A.M. , Tumasyan, A. , Adam, W.
(2018) *Physical Review Letters*

View all related documents based on references