



Search for flavor changing neutral currents in decays of top quarks

DO Collaboration

V.M. Abazov^{ai}, B. Abbott^{bu}, B.S. Acharya^{ac}, M. Adams^{aw}, T. Adams^{au}, G.D. Alexeev^{ai}, G. Alkhazov^{am}, A. Alton^{bi,1}, G. Alverson^{bh}, G.A. Alves^b, L.S. Ancu^{ah}, M. Aoki^{av}, M. Arov^{bf}, A. Askew^{au}, B. Åsman^{ao}, O. Atramentov^{bm}, C. Avila^h, J. BackusMayes^{cb}, F. Badaud^m, L. Bagby^{av}, B. Baldin^{av}, D.V. Bandurin^{au}, S. Banerjee^{ac}, E. Barberis^{bh}, P. Baringer^{bd}, J. Barreto^c, J.F. Bartlett^{av}, U. Bassler^r, V. Bazterra^{aw}, S. Beale^f, A. Bean^{bd}, M. Begalli^c, M. Begel^{bs}, C. Belanger-Champagne^{ao}, L. Bellantoni^{av}, S.B. Beri^{aa}, G. Bernardi^q, R. Bernhard^v, I. Bertram^{ap}, M. Besançon^r, R. Beuselinck^{aq}, V.A. Bezzubov^{al}, P.C. Bhat^{av}, V. Bhatnagar^{aa}, G. Blazey^{ax}, S. Blessing^{au}, K. Bloom^{bl}, A. Boehnlein^{av}, D. Boline^{br}, T.A. Bolton^{be}, E.E. Boos^{ak}, G. Borissov^{ap}, T. Bose^{bg}, A. Brandt^{bx}, O. Brandt^w, R. Brock^{bj}, G. Brooijmans^{bp}, A. Bross^{av}, D. Brown^q, J. Brown^q, X.B. Bu^{av}, M. Buehler^{ca}, V. Buescher^x, V. Bunichev^{ak}, S. Burdin^{ap,2}, T.H. Burnett^{cb}, C.P. Buszello^{ao}, B. Calpas^o, E. Camacho-Pérez^{af}, M.A. Carrasco-Lizarraga^{bd}, B.C.K. Casey^{av}, H. Castilla-Valdez^{af}, S. Chakrabarti^{br}, D. Chakraborty^{ax}, K.M. Chan^{bb}, A. Chandra^{bz}, G. Chen^{bd}, S. Chevalier-Théry^r, D.K. Cho^{bw}, S.W. Cho^{ae}, S. Choi^{ae}, B. Choudhary^{ab}, T. Christoudias^{aq}, S. Cihangir^{av}, D. Claes^{bl}, J. Clutter^{bd}, M. Cooke^{av}, W.E. Cooper^{av}, M. Corcoran^{bz}, F. Couderc^r, M.-C. Cousinou^o, A. Croc^r, D. Cutts^{bw}, A. Das^{as}, G. Davies^{aq}, K. De^{bx}, S.J. de Jong^{ah}, E. De La Cruz-Burelo^{af}, F. Déliot^r, M. Demarteau^{av}, R. Demina^{bq}, D. Denisov^{av}, S.P. Denisov^{al}, S. Desai^{av}, K. DeVaughan^{bl}, H.T. Diehl^{av}, M. Diesburg^{av}, A. Dominguez^{bl}, T. Dorland^{cb}, A. Dubey^{ab}, L.V. Dudko^{ak}, D. Duggan^{bm}, A. Duperrin^o, S. Dutt^{aa}, A. Dyshkant^{ax}, M. Eads^{bl}, D. Edmunds^{bj}, J. Ellison^{at}, V.D. Elvira^{av}, Y. Enari^q, H. Evans^{az}, A. Evdokimov^{bs}, V.N. Evdokimov^{al}, G. Facini^{bh}, T. Ferbel^{bq}, F. Fiedler^x, F. Filthaut^{ah}, W. Fisher^{bj}, H.E. Fisk^{av}, M. Fortner^{ax}, H. Fox^{ap}, S. Fuess^{av}, T. Gadfort^{bs}, A. Garcia-Bellido^{bq}, V. Gavrilov^{aj}, P. Gay^m, W. Geist^s, W. Geng^{o,bj}, D. Gerbaudo^{bn}, C.E. Gerber^{aw}, Y. Gershtein^{bm}, G. Ginther^{av,bq}, G. Golovanov^{ai}, A. Goussiou^{cb}, P.D. Grannis^{br}, S. Greder^s, H. Greenlee^{av}, Z.D. Greenwood^{bf}, E.M. Gregores^d, G. Grenier^t, Ph. Gris^m, J.-F. Grivaz^p, A. Grohsjean^r, S. Grünendahl^{av}, M.W. Grünewald^{ad}, T. Guillemain^p, F. Guo^{br}, G. Gutierrez^{av}, P. Gutierrez^{bu}, A. Haas^{bp,3}, S. Hagopian^{au}, J. Haley^{bh}, L. Han^g, K. Harder^{ar}, A. Harel^{bq}, J.M. Hauptman^{bc}, J. Hays^{aq}, T. Head^{ar}, T. Hebbeker^u, D. Hedin^{ax}, H. Hegab^{bv}, A.P. Heinson^{at}, U. Heintz^{bw}, C. Hensel^w, I. Heredia-De La Cruz^{af}, K. Herner^{bi}, G. Hesketh^{ar,4}, M.D. Hildreth^{bb}, R. Hirosky^{ca}, T. Hoang^{au}, J.D. Hobbs^{br}, B. Hoeneisen^l, M. Hohlfeld^x, Z. Hubacek^{j,r}, N. Huske^q, V. Hynek^j, I. Iashvili^{bo}, R. Illingworth^{av}, A.S. Ito^{av}, S. Jabeen^{bw}, M. Jaffré^p, D. Jamin^o, A. Jayasinghe^{bu}, R. Jesik^{aq}, K. Johns^{as}, M. Johnson^{av}, D. Johnston^{bl}, A. Jonckheere^{av}, P. Jonsson^{aq}, J. Joshi^{aa}, A. Juste^{an}, K. Kaadze^{be}, E. Kajfasz^o, D. Karmanov^{ak}, P.A. Kasper^{av}, I. Katsanos^{bl}, R. Kehoe^{by}, S. Kermiche^o, N. Khalatyan^{av}, A. Khanov^{bv}, A. Kharchilava^{bo}, Y.N. Kharzheev^{ai}, D. Khatidze^{bw}, M.H. Kirby^{ay}, J.M. Kohli^{aa}, A.V. Kozelov^{al}, J. Kraus^{bj}, S. Kulikov^{al}, A. Kumar^{bo}, A. Kupco^k, T. Kurča^t, V.A. Kuzmin^{ak}, J. Kvitaⁱ, S. Lammers^{az}, G. Landsberg^{bw}, P. Lebrun^t, H.S. Lee^{ae}, S.W. Lee^{bc}, W.M. Lee^{av}, J. Lellouch^q, L. Li^{af}, Q.Z. Li^{av}, S.M. Lietti^e, J.K. Lim^{ae}, D. Lincoln^{av}, J. Linnemann^{bj}, V.V. Lipaev^{al}, R. Lipton^{av}, Y. Liu^g, Z. Liu^f, A. Lobodenko^{am}, M. Lokajicek^k, R. Lopes de Sa^{br}, H.J. Lubatti^{cb}, R. Luna-Garcia^{af,5}, A.L. Lyon^{av}, A.K.A. Maciel^b, D. Mackin^{bz}, R. Madar^r, R. Magaña-Villalba^{af}, S. Malik^{bl}, V.L. Malyshev^{ai}, Y. Maravin^{be}, J. Martínez-Ortega^{af}, R. McCarthy^{br}, C.L. McGivern^{bd}, M.M. Meijer^{ah}, A. Melnitchouk^{bk}, D. Menezes^{ax}, P.G. Mercadante^d, M. Merkin^{ak}, A. Meyer^u, J. Meyer^w, F. Miconi^s, N.K. Mondal^{ac}, G.S. Muanza^o, M. Mulhearn^{ca}, E. Nagy^o, M. Naimuddin^{ab}, M. Narain^{bw}, R. Nayyar^{ab}, H.A. Neal^{bi}, J.P. Negret^h,

P. Neustroev^{am}, S.F. Novaes^e, T. Nunnemann^y, G. Obrant^{am}, J. Orduna^{bz}, N. Osman^o, J. Osta^{bb}, G.J. Otero y Garzón^a, M. Padilla^{at}, A. Pal^{bx}, M. Pangilinan^{bw}, N. Parashar^{ba}, V. Parihar^{bw}, S.K. Park^{ae}, J. Parsons^{bp}, R. Partridge^{bw,3}, N. Parua^{az}, A. Patwa^{bs}, B. Penning^{av}, M. Perfilov^{ak}, K. Peters^{ar}, Y. Peters^{ar}, K. Petridis^{ar}, G. Petrillo^{bq}, P. Pétroff^p, R. Piegaia^a, J. Piper^{bj}, M.-A. Pleier^{bs}, P.L.M. Podesta-Lerma^{af,6}, V.M. Podstavkov^{av}, M.-E. Pol^b, P. Polozov^{aj}, A.V. Popov^{al}, M. Prewitt^{bz}, D. Price^{az}, N. Prokopenko^{al}, S. Protopopescu^{bs}, J. Qian^{bi}, A. Quadt^w, B. Quinn^{bk}, M.S. Rangel^b, K. Ranjan^{ab}, P.N. Ratoff^{ap}, I. Razumov^{al}, P. Renkel^{by}, M. Rijssenbeek^{br}, I. Ripp-Baudot^s, F. Rizatdinova^{bv}, M. Rominsky^{av}, A. Ross^{ap}, C. Royon^r, P. Rubinov^{av}, R. Ruchti^{bb}, G. Safronov^{aj}, G. Sajotⁿ, P. Salcido^{ax}, A. Sánchez-Hernández^{af}, M.P. Sanders^y, B. Sanghi^{av}, A.S. Santos^e, G. Savage^{av}, L. Sawyer^{bf}, T. Scanlon^{aq}, R.D. Schamberger^{br}, Y. Scheglov^{am}, H. Schellman^{ay}, T. Schliephake^z, S. Schlobohm^{cb}, C. Schwanenberger^{ar}, R. Schwienhorst^{bj}, J. Sekaric^{bd}, H. Severini^{bu}, E. Shabalina^w, V. Shary^r, A.A. Shchukin^{al}, R.K. Shivpuri^{ab}, V. Simak^j, V. Sirotenko^{av}, P. Skubic^{bu}, P. Slattery^{bq}, D. Smirnov^{bb}, K.J. Smith^{bo}, G.R. Snow^{bl}, J. Snow^{bt}, S. Snyder^{bs}, S. Söldner-Rembold^{ar}, L. Sonnenschein^u, K. Soustruznikⁱ, J. Starkⁿ, V. Stolin^{aj}, D.A. Stoyanova^{al}, M. Strauss^{bu}, D. Strom^{aw}, L. Stutte^{av}, L. Suter^{ar}, P. Svoisky^{bu}, M. Takahashi^{ar}, A. Tanasijczuk^a, W. Taylor^f, M. Titov^r, V.V. Tokmenin^{ai}, Y.-T. Tsai^{bq}, D. Tsybychev^{br}, B. Tuchming^r, C. Tully^{bn}, P.M. Tuts^{bp}, L. Uvarov^{am}, S. Uvarov^{am}, S. Uzunyan^{ax}, R. Van Kooten^{az}, W.M. van Leeuwen^{ag}, N. Varelas^{aw}, E.W. Varnes^{as}, I.A. Vasilyev^{al}, P. Verdier^t, L.S. Vertogradov^{ai}, M. Verzocchi^{av}, M. Vesterinen^{ar}, D. Vilanova^r, P. Vint^{aq}, P. Vokac^j, H.D. Wahl^{au}, M.H.L.S. Wang^{bq}, J. Warchol^{bb}, G. Watts^{cb}, M. Wayne^{bb}, M. Weber^{av,7}, L. Welty-Rieger^{ay}, A. White^{bx}, D. Wicke^z, M.R.J. Williams^{ap}, G.W. Wilson^{bd}, M. Wobisch^{bf}, D.R. Wood^{bh}, T.R. Wyatt^{ar}, Y. Xie^{av}, C. Xu^{bi}, S. Yacoob^{ay}, R. Yamada^{av}, W.-C. Yang^{ar}, T. Yasuda^{av}, Y.A. Yatsunenkov^{ai}, Z. Ye^{av}, H. Yin^{av}, K. Yip^{bs}, S.W. Youn^{av}, J. Yu^{bx}, S. Zelitch^{ca}, T. Zhao^{cb}, B. Zhou^{bi}, J. Zhu^{bi}, M. Zielinski^{bq}, D. Zieminska^{az}, L. Zivkovic^{bw}

^a Universidad de Buenos Aires, Buenos Aires, Argentina

^b LAFEX, Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil

^c Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil

^d Universidade Federal do ABC, Santo André, Brazil

^e Instituto de Física Teórica, Universidade Estadual Paulista, São Paulo, Brazil

^f Simon Fraser University, Vancouver, British Columbia, and York University, Toronto, Ontario, Canada

^g University of Science and Technology of China, Hefei, People's Republic of China

^h Universidad de los Andes, Bogotá, Colombia

ⁱ Charles University, Faculty of Mathematics and Physics, Center for Particle Physics, Prague, Czech Republic

^j Czech Technical University in Prague, Prague, Czech Republic

^k Center for Particle Physics, Institute of Physics, Academy of Sciences of the Czech Republic, Prague, Czech Republic

^l Universidad San Francisco de Quito, Quito, Ecuador

^m LPC, Université Blaise Pascal, CNRS/IN2P3, Clermont, France

ⁿ LPSC, Université Joseph Fourier Grenoble 1, CNRS/IN2P3, Institut National Polytechnique de Grenoble, Grenoble, France

^o CPPM, Aix-Marseille Université, CNRS/IN2P3, Marseille, France

^p LAL, Université Paris-Sud, CNRS/IN2P3, Orsay, France

^q LPNHE, Universités Paris VI and VII, CNRS/IN2P3, Paris, France

^r CEA, Ifu, SPP, Saclay, France

^s IPHC, Université de Strasbourg, CNRS/IN2P3, Strasbourg, France

^t IPNL, Université Lyon 1, CNRS/IN2P3, Villeurbanne, France and Université de Lyon, Lyon, France

^u III. Physikalisches Institut A, RWTH Aachen University, Aachen, Germany

^v Physikalisches Institut, Universität Freiburg, Freiburg, Germany

^w II. Physikalisches Institut, Georg-August-Universität Göttingen, Göttingen, Germany

^x Institut für Physik, Universität Mainz, Mainz, Germany

^y Ludwig-Maximilians-Universität München, München, Germany

^z Fachbereich Physik, Bergische Universität Wuppertal, Wuppertal, Germany

^{aa} Panjab University, Chandigarh, India

^{ab} Delhi University, Delhi, India

^{ac} Tata Institute of Fundamental Research, Mumbai, India

^{ad} University College Dublin, Dublin, Ireland

^{ae} Korea Detector Laboratory, Korea University, Seoul, Republic of Korea

^{af} CINVESTAV, Mexico City, Mexico

^{ag} FOM-Institute NIKHEF and University of Amsterdam/NIKHEF, Amsterdam, The Netherlands

^{ah} Radboud University Nijmegen/NIKHEF, Nijmegen, The Netherlands

^{ai} Joint Institute for Nuclear Research, Dubna, Russia

^{aj} Institute for Theoretical and Experimental Physics, Moscow, Russia

^{ak} Moscow State University, Moscow, Russia

^{al} Institute for High Energy Physics, Protvino, Russia

^{am} Petersburg Nuclear Physics Institute, St. Petersburg, Russia

^{an} Institució Catalana de Recerca i Estudis Avançats (ICREA) and Institut de Física d'Altes Energies (IFAE), Barcelona, Spain

^{ao} Stockholm University, Stockholm and Uppsala University, Uppsala, Sweden

^{ap} Lancaster University, Lancaster LA1 4YB, United Kingdom

^{aq} Imperial College London, London SW7 2AZ, United Kingdom

^{ar} The University of Manchester, Manchester M13 9PL, United Kingdom

^{as} University of Arizona, Tucson, AZ 85721, USA

Download English Version:

<https://daneshyari.com/en/article/10722801>

Download Persian Version:

<https://daneshyari.com/article/10722801>

[Daneshyari.com](https://daneshyari.com)