

# THE DØ COLLABORATION

16 July 2010

G.J. Otero y Garzón, R. Piegaia, A. Tanasijczuk  
**Universidad de Buenos Aires, Buenos Aires, Argentina**

G.A. Alves, J. Barreto, A.K.A. Maciel, M.C. Martins Jr  
**LAFEX, Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil**

M. Begalli  
**Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil**

E.M. Gregores, P.G. Mercadante  
**Universidade Federal do ABC, Santo André, Brazil**

S.M. Lietti, S.F. Novaes, A.S. Santos  
**Instituto de Física Teórica, Universidade Estadual Paulista, São Paulo, Brazil**

S. Beale, Z. Liu, W. Taylor  
**Simon Fraser University and York University, Canada**

X.B. Bu, L. Han, Y. Liu, S. Yang, H. Yin  
**University of Science and Technology of China, Hefei, People's Republic of China**

C. Avila, B. Gómez, J.P. Negret  
**Universidad de los Andes, Bogotá, Colombia**

J. Kvita, R. Leitner, K. Soustruznik  
**Charles University, Faculty of Mathematics and Physics, Center for Particle Physics, Prague, Czech Republic**

K. Augsten, Z. Hubacek, V. Hynek, M. Marcisovsky, V. Simak, P. Vokac, V. Vrba  
**Czech Technical University in Prague, Prague, Czech Republic**

A. Kupco, M. Lokajicek  
**Center for Particle Physics, Institute of Physics, Academy of Sciences of the Czech Republic, Prague, Czech Republic**

B. Hoeneisen  
**Universidad San Francisco de Quito, Quito, Ecuador**

F. Badaud, P. Gay, Ph. Gris  
**LPC, Université Blaise Pascal, CNRS/IN2P3, Clermont, France**

H. Li, G. Sajot, J. Stark

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

B. Calpas, M.-C. Cousinou, A. Duperrin, W. Geng, D. Jamin, E. Kajfasz, S. Kermiche, G.S. Muanza, E. Nagy

**CPPM, Aix-Marseille Université, CNRS/IN2P3, Marseille, France**

J.-F. Grivaz, T. Guillemin, M. Jaffré, P. Pétroff, M.S. Rangel

**LAL, Université Paris-Sud, CNRS/IN2P3, Orsay, France**

G. Bernardi, D. Brown, J. Brown, Y. Enari, N. Huske, J. Lellouch

**LPNHE, Universités Paris VI and VII, CNRS/IN2P3, Paris, France**

U. Bassler, M. Besançon, S. Chevalier-Théry, F. Couderc, A. Croc, F. Déliot, C. Deterre, A. Grohsjean, P. Lutz, R. Madar, C. Royon, V. Shary, M. Titov, B. Tuchming, D. Vilanova

**CEA, Irfu, SPP, Saclay, France**

S. Greder, F. Miconi, I. Ripp-Baudot

**IPHC, Université de Strasbourg, CNRS/IN2P3, Strasbourg, France**

G. Grenier, T. Kurča, P. Lebrun, P. Verdier

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

T. Hebbeker, A. Meyer, L. Sonnenschein, R. Bernhard, O. Brandt, C. Hensel, J. Meyer, A. Quadt, E. Shabalina, V. Buescher, F. Fiedler, M. Hohlfeld, S. Tapprogge, J. Weichert, D. Wicke, T. Nunnemann, M.P. Sanders, T. Schliephake

**III. Physikalisches Institut A, RWTH Aachen University; Physikalisches Institut, Universität Freiburg; II. Physikalisches Institut, Georg-August-Universität Göttingen; Institut für Physik, Universität Mainz; Ludwig-Maximilians-Universität München; Fachbereich Physik, Bergische Universität Wuppertal Germany**

S.B. Beri, V. Bhatnagar, S. Dutt, J. Joshi, J.M. Kohli

**Panjab University, Chandigarh, India**

B. Choudhary, A. Dubey, M. Naimuddin, R. Nayyar, K. Ranjan, R.K. Shivpuri

**Delhi University, Delhi, India**

B.S. Acharya, S. Banerjee, N.K. Mondal

**Tata Institute of Fundamental Research, Mumbai, India**

M.W. Grünewald

**University College Dublin, Dublin, Ireland**

S.W. Cho, S. Choi, M. Jeong, H.S. Lee, K.S. Lee, J.K. Lim, S.K. Park  
**Korea Detector Laboratory, Korea University, Seoul, Korea**

E. Camacho-Pérez, M.A. Carrasco-Lizarraga, H. Castilla-Valdez, E. De La Cruz-Burelo,  
I. Heredia-De La Cruz, R. Luna-Garcia, R. Magaña-Villalba, J. Martínez-Ortega, J. Orduna,  
P.L.M. Podesta-Lerma, A. Sánchez-Hernández  
**CINVESTAV, Mexico City, Mexico**

W.M. van Leeuwen  
**FOM-Institute NIKHEF and University of Amsterdam/NIKHEF, Amsterdam, The Netherlands**

L.S. Ancu, S.J. de Jong, F. Filthaut, M.M. Meijer, N.A. Naumann, P. Svoisky  
**Radboud University Nijmegen/NIKHEF, Nijmegen, The Netherlands**

V.M. Abazov, G.D. Alexeev, G. Golovanov, Y.N. Kharzheev, V.L. Malyshev, Y.P. Merekov, G. Panov,  
M. Patsyuk, S.Y. Porokhovoi, V. Rodionov, A. Rozhdestvenski, N.A. Russakovich, N.B. Skachkov,  
V.V. Tokmenin, L.S. Vertogradov, Y. Vertogradova, Y.A. Yatsunenko  
**Joint Institute for Nuclear Research, Dubna, Russia**

V. Gavrilov, V.S. Goryachev, I. Kiselevich, M. Kubantsev, P. Polozov, G. Safronov, V. Stolin  
**Institute for Theoretical and Experimental Physics, Moscow, Russia**

E.E. Boos, V. Bunichev, L.V. Dudko, D. Karmanov, V.A. Kuzmin, M. Merkin, M. Perfilov  
**Moscow State University, Moscow, Russia**

A. Baskakov, V.A. Bezzubov, S.P. Denisov, V.N. Evdokimov, V.N. Goryachev, V.I. Koreshev,  
S. Koshkarev, M. Kostin, A.V. Kozelov, E.A. Kozlovsky, S. Kulikov, V.V. Lipaev, A.V. Popov,  
N. Prokopenko, I. Razumov, A.A. Shchukin, D.A. Stoyanova, I.A. Vasilyev, S.A. Zvyagintsev  
**Institute for High Energy Physics, Protvino, Russia**

G. Alkhazov, S. Evstyukhin, V. Kim, A. Lobodenko, P. Neustroev, G. Obrant, V. Oreshkin, Y. Scheglov,  
L. Uvarov, S. Uvarov  
**Petersburg Nuclear Physics Institute, St. Petersburg, Russia**

B. Åsman, C. Belanger-Champagne, T. Ekelöf  
**Stockholm University and Uppsala University, Sweden**

V. Aushev, I. Kadenko, O. Kononenko, Y. Onishchuk, A. Saliı̄, O. Tomalak, V. Trusov, O. Zenaiev,  
M. Zolko  
**Kiev National University, Kiev, Ukraine**

I. Bertram, G. Borissov, N.S. Braithwaite, S. Burdin, H. Fox, P.N. Ratoff, A. Ross, M.R.J. Williams  
**Lancaster University, Lancaster LA1 4YB, United Kingdom**

R. Beuselinck, C.P. Buszello, G. Davies, J.F. Hassard, J. Hays, R. Jesik, P. Jonsson, N. Osman, T. Scanlon  
**Imperial College London, London SW7 2AZ, United Kingdom**

J.P. Agnew, P.F. Ding, K. Harder, T. Head, K. Peters, Y. Peters, K. Petridis, C. Schwanenberger,  
S. Söldner-Rembold, L. Suter, M. Takahashi, M. Vesterinen, T.R. Wyatt, W.-C. Yang  
**The University of Manchester, Manchester M13 9PL, United Kingdom**

A. Das, K. Johns, E.W. Varnes  
**University of Arizona, Tucson, Arizona 85721, USA**

J. Ellison, A.P. Heinson, L. Li, M. Padilla  
**University of California Riverside, Riverside, California 92521, USA**

T. Adams, A. Askew, D.V. Bandurin, S. Blessing, S. Hagopian, T. Hoang, H.D. Wahl  
**Florida State University, Tallahassee, Florida 32306, USA**

M. Aoki, L. Bagby, B. Baldin, J.F. Bartlett, L. Bellantoni, P.C. Bhat, A. Boehnlein, A. Bross,  
B.C.K. Casey, S. Cihangir, M. Cooke, W.E. Cooper, M. Demarteau, D. Denisov, S. Desai, H.T. Diehl,  
M. Diesburg, V.D. Elvira, H.E. Fisk, S. Fuess, G. Ginther, H. Greenlee, S. Grünendahl, G. Gutierrez,  
R. Illingworth, A.S. Ito, M. Johnson, A. Jonckheere, A.W. Jung, A. Juste, P.A. Kasper, N. Khalatyan,  
W.M. Lee, Q.Z. Li, D. Lincoln, R. Lipton, A.L. Lyon, H.E. Montgomery, B. Penning, V.M. Podstavkov,  
M. Rominsky, P. Rubinov, B. Sanghi, G. Savage, V. Sirotenko, L. Stutte, M. Verzocchi, M. Weber, Y. Xie,  
R. Yamada, T. Yasuda, Z. Ye, S.W. Youn, M. Zanabria  
**Fermi National Accelerator Laboratory, Batavia, Illinois 60510, USA**

M. Adams, V. Bazterra, C.E. Gerber, D. Strom, N. Varelas  
**University of Illinois at Chicago, Chicago, Illinois 60607, USA**

G. Blazey, K. Caymaz, D. Chakraborty, A. Dyshkant, M. Fortner, D. Hedin, J. Kozminski, D. Menezes,  
P. Salcido, S. Uzunyan  
**Northern Illinois University, DeKalb, Illinois 60115, USA**

M.H. Kirby, A. Kobach, H. Schellman, S. Yacoob  
**Northwestern University, Evanston, Illinois 60208, USA**

H. Evans, S. Lammers, N. Parua, D. Price, R. Van Kooten, D. Zieminska  
**Indiana University, Bloomington, Indiana 47405, USA**

N. Parashar  
**Purdue University Calumet, Hammond, Indiana 46323, USA**

K.M. Chan, M.D. Hildreth, J. Osta, R. Ruchti, D. Smirnov, J. Warchol, M. Wayne  
**University of Notre Dame, Notre Dame, Indiana 46556, USA**

J. Cochran, J.M. Hauptman, S.W. Lee, N. Triplett  
**Iowa State University, Ames, Iowa 50011, USA**

P. Baringer, A. Bean, G. Chen, J. Clutter, C.L. McGivern, J. Sekaric, G.W. Wilson  
**University of Kansas, Lawrence, Kansas 66045, USA**

K. Kaadze, Y. Maravin  
**Kansas State University, Manhattan, Kansas 66506, USA**

M. Arov, S. Atkins, K. Chakravarthula, Z.D. Greenwood, L. Sawyer, M. Wobisch  
**Louisiana Tech University, Ruston, Louisiana 71272, USA**

T. Bose  
**Boston University, Boston, Massachusetts 02215, USA**

G. Alverson, E. Barberis, G. Facini, J. Haley, D.R. Wood  
**Northeastern University, Boston, Massachusetts 02115, USA**

A. Alton, K. Herner, J. Zhu, H.A. Neal, J. Qian, A. Wilson, C. Xu, B. Zhou  
**University of Michigan, Ann Arbor, Michigan 48109, USA**

R. Brock, D. Edmunds, W. Fisher, W. Geng, J. Kraus, J. Linnemann, J. Piper, R. Schwienhorst  
**Michigan State University, East Lansing, Michigan 48824, USA**

S. Bhatia, A. Melnitchouk, B. Quinn  
**University of Mississippi, University, Mississippi 38677, USA**

K. Bloom, D. Claes, K. DeVaughan, A. Dominguez, M. Eads, D. Johnston, I. Katsanos, S. Malik,  
G.R. Snow  
**University of Nebraska, Lincoln, Nebraska 68588, USA**

O. Atramentov, D. Duggan, Y. Gershtein  
**Rutgers University, Piscataway, New Jersey 08855, USA**

D. Gerbaudo, C. Tully  
**Princeton University, Princeton, New Jersey 08544, USA**

I. Iashvili, A. Kharchilava, A. Kumar, K.J. Smith  
**State University of New York, Buffalo, New York 14260, USA**

G. Brooijmans, S. Caughron, M.S. Cooke, A. Haas, J. Parsons, L. Zivkovic  
**Columbia University, New York, New York 10027, USA**

R. Demina, T. Ferbel, A. Garcia-Bellido, A. Harel, D. Orbaker, G. Petrillo, P. Slattery, Y.-T. Tsai,  
M.H.L.S. Wang, M. Zielinski  
**University of Rochester, Rochester, New York 14627, USA**

D. Boline, S. Chakrabarti, P.D. Grannis, F. Guo, J.D. Hobbs, R. Lopes de Sa, R. McCarthy,  
M. Rijssenbeek, R.D. Schamberger, K. Tschann-Grimm, D. Tsybychev  
**State University of New York, Stony Brook, New York 11794, USA**

M. Begel, A. Evdokimov, A. Patwa, M.-A. Pleier, S. Protopopescu, S. Snyder, K. Yip  
**Brookhaven National Laboratory, Upton, New York 11973, USA**

J. Snow  
**Langston University, Langston, Oklahoma 73050, USA**

B. Abbott, P. Gutierrez, A. Jayasinghe, H. Severini, P. Skubic, M. Strauss  
**University of Oklahoma, Norman, Oklahoma 73019, USA**

H. Hegab, A. Khanov, F. Rizatdinova  
**Oklahoma State University, Stillwater, Oklahoma 74078, USA**

J. Alimena, D.K. Cho, D. Cutts, U. Heintz, R. Hooper, S. Jabeen, D. Khatidze, G. Landsberg, M. Narain,  
M. Pangilinan, V. Parihar, R. Partridge, H.D. Yoo  
**Brown University, Providence, Rhode Island 02912, USA**

A. Brandt, K. De, M. Sosebee, B. Spurlock, A. White, J. Yu  
**University of Texas, Arlington, Texas 76019, USA**

Y. Ilchenko, R. Kehoe, P. Renkel, J. South  
**Southern Methodist University, Dallas, Texas 75275, USA**

A. Chandra, M. Corcoran, D. Mackin, M. Prewitt  
**Rice University, Houston, Texas 77005, USA**

M. Buehler, C. Dukes, R. Hirosky, M. Mulhearn, E. Munyangabe, A. Norman, S. Zelitch  
**University of Virginia, Charlottesville, Virginia 22901, USA**

J. BackusMayes, T.H. Burnett, T. Dorland, A. Goussiou, H.J. Lubatti, S. Schlobohm, G. Watts, T. Zhao  
**University of Washington, Seattle, Washington 98195, USA**