

CURRICULUM VITAE

Henry Jonathan Frisch

Personal:

Born: August 21, 1944 – Los Alamos, New Mexico
Married: Priscilla Chapman Frisch, March 19, 1969
Children: Sarah Tenaya, born February 14, 1974
Geneviève Alexandra, born November 29, 1977

Education:

B.A., Harvard, 1966 (Physics)
Ph.D., Berkeley, 1971 (Physics)

Employment:

Instructor of Physics, The University of Chicago, 1971-73
Assistant Professor of Physics, The University of Chicago, 1973-77
Associate Professor of Physics, The University of Chicago, 1977-84
Professor of Physics, The University of Chicago, 1984-present
Joint Appointment, High Energy Physics Division, ANL, 2009-2011

Honors:

Harvard College Scholarship, 1962-63 and 1965-66
Leeds and Northrop Foundation, Predoctoral Fellow, 1966-67
Fellow, American Physical Society, 1986
Quantrell Award for Excellence in Teaching, University of Chicago, 1992
University of Chicago Provost's Teaching Award 2006-7

HEP/Physics Committees and Service:

High Energy Physics Advisory Panel (HEPAP), 1974-77
1974 HEPAP Woods Hole Subpanel on New Facilities
1975 HEPAP Woods Hole Subpanel on New Facilities
1977 HEPAP Woods Hole Subpanel on New Facilities
Executive Committee of the Division of Particles and Fields, APS, 1979-82
Executive Committee of the Users Organization, Fermilab, 1979-81
Co-Chair, 1979 Gordon Conference on Elementary Particle Interactions
SLAC Experimental Program Advisory Committee, 1987-89
Argonne High Energy Physics Division Review Committee, 1987-89
1989 HEPAP Subpanel: "HEP and SSC Over the Next Decade"
Chair, Nominating Committee, Division of Particles and Fields, APS, 1992
Divisional Councilor, Division of Particles and Fields, APS, 1/95-12/98
Panofsky Prize Committee, American Physical Society, 1994-95
Committee on the International Freedom of Scientists, 1996-1998
Vice-Chair, Board of the Bulletin of the Atomic Scientists, 2003- 2005
Tanaka Prize Committee, American Physical Society, 2005
Board of the Bulletin of the Atomic Scientists, 2002- 2008
Associate Divisional Editor, Physical Review Letters, 2010-present

Conference Advisory and Organizing Committees (recent entries only):

Co-Chair: 1999 ASPEN Winter Conference on Particle Physics, January 17-23, 1999
Advisory Panel: PASCOS99, 7th International Symposium on Particles, Strings and Cosmology, Granlibakken, Lake Tahoe, California, December 10-16, 1999
Program Committee: VIETNAM 2000 – July 19-24, Hanoi, Vietnam
International Advisory Committee: SUSY2K, 8th International Conference on Supersymmetries in Physics, June 26-July 1, 2000, CERN, Geneva, Switzerland
Organizing Committee: From the Smallest to the Largest Distances, Institute of Theoretical and Experimental Physics, Moscow, Russia, May 24-26, 2001
International Organizing Committee: Borders and Frontiers In Physics, October 4-5 2002, "College de France", Paris;
International Advisory Committee: 2002 Aspen Winter Conference on Particle Physics Current and Upcoming Discoveries, February 3-9, Aspen Colorado
International Advisory Committee: The 10th International Conference on Supersymmetry and Unification of Fundamental Interactions; DESY in Hamburg (Germany), June 17-23, 2002;
Organizing Committee: XXXXth Rencontres de Moriond – Electroweak Interactions and Unified Theories, March 5-12, 2005, La Thuile, Italy
Program Committee: Hadron Collider Symposium, July 4-9, 2005, Les Diablerets, Switz.
Organizing Committee: Pico-Sec Timing Hardware Workshop; Chicago, IL, USA; 18 November, 2005
Organizing Committee: XXXXIth Rencontres de Moriond – Electroweak Interactions and Unified Theories, March 18-25, 2006, La Thuile, Italy
Organizing Committee: XXXXIIth Rencontres de Moriond – Electroweak Interactions and Unified Theories, March 10-17, 2007, La Thuile, Italy
Organizing Committee: Pico-Sec Simulation Workshop; Chicago, IL, USA; 12 December, 2006
Organizing Committee: Aspen Winter Conference, "New Physics at the Electroweak Scale and New Signals at Hadron Colliders", Jan. 8-13, 2007
Organizing Committee: Workshop on Timing Detectors, March 8-9, 2007, Saclay, Ormes les Messiers, France
Organizing Committee: XXXXIIIth Rencontres de Moriond – Electroweak Interactions and Unified Theories, March 1-8, 2008, La Thuile, Italy
Organizing Committee: Workshop on Psec Timing, Chicago, IL, USA; March 17-18, 2008
Organizing Committee: Workshop on Timing Detectors: Medical And Particle Physics Applications; Institute of Nuclear Physics in Lyon (IPNL), France; 15-16 October, 2008
Organizing Committee: Photo-Detectors in Water Cherenkov Neutrino Detectors; Workshop, Argonne National Laboratory, Lemont, IL; 20 December 2008
Organizing Committee: First Workshop on Photocathodes: 300nm-500nm, Univ. of Chicago, Chicago, IL; 20-21 July 2009
Organizing Committee: The Development of Large Area Psec Photo-Devices; Workshop VII, Argonne National Laboratory, Lemont, IL; 26-27 February 2009
Organizing Committee: Workshop on Electronics and DAQ for Timing Detectors in Medical and Particle Physics, Clermont-Ferrand, France ; 28-29 January 2010
Organizing Committee: Technology and Instrumentation in Particle Physics (TIPP2011), Chicago IL, June 9 - 14, 2011.

University Service:

College Council, University of Chicago, 1976-77
Governing Committee of the Physical Sciences Collegiate Division, 1976-77
Committee of the College Council, University of Chicago, 1976-77
College Council, University of Chicago, 1988-89
Governing Committee of the Physical Sciences Collegiate Division, 1991-93
Policy Committee, Physical Sciences Division, University of Chicago, 1992
Ad Hoc Committee on International Affairs, 2001
Board of the Graham School, 2001-2002
Chair, Board of the Graham School, 2002-3
Chair, Committee for the Center for Elementary Math and Science Education, 2002-
Council of the University Senate 2002-2005
Committee of the Council of the University Senate 2003-2005
Spokesperson of the Committee of the Council of the University Senate 2004-2005
Presidential Search Committee 2005-2006

Science Education:

Co-Founder (with P. Frisch) Believe in the Public Schools, a parents organization which participated in ending the 1989 teachers strike.
Co-Founder (with P. Frisch, L. Lederman, and G. Berry) of the Chicago Education Federation (CEF: a not-for-profit consortium of 13 universities and colleges in Chicago)
Co-Founder of the Teachers Academy for Mathematics and Science (TAMS, a project of CEF)
Steering Committee of TAMS, 1989
Co-Chair Program Committee, TAMS, 1991-1998
Program Committee, TAMS, 1998-2003
Member of Board, TAMS, 1991-2003
Chair, Advisory Committee, Center for Secondary Science and Math Education, Univ. of Chicago, 2003-2004
Advisory Committee, Center for Secondary Science and Math Education, 2003-present

Publications

Additional links to Papers, Talks, CDF Notes, and Essays are available at my web page: <http://hep.uchicago.edu/~frisch>

1 Primary Publications:

Refereed papers for which I was a primary author.

102. E. Angelico, T. Seiss, B. W. Adams, A. Elagin, H. J. Frisch, E. Spieglan;
Capacitively coupled pickup in MCP-based photo-detectors using a conductive, metallic anode;
Nucl. Inst. Meth. Phys. Res. A. (Oct. 2016)
101. A. Elagin, H. J. Frisch, B. Naranjo, J. Ouellet, L. Winslow, T. Wongjirad;
Separating Double-Beta Decay Events from Solar Neutrino Interactions in a Kiloton-Scale Liquid Scintillator Detector By Fast Timing; Nucl. Inst. Meth. Phys. Res. A. (Sept. 2016)
100. E. Oberla and H.J. Frisch;
Charged particle tracking in a water Cherenkov optical time-projection chamber;
Nucl. Inst. Meth. Phys. Res. A. Volume 814, 19-32, (April 2016)
99. B.W. Adams, A. Elagin, H. Frisch, R. Obaid, E. Oberla, A. Vostrikov, R. Wagner, J. Wang, M. Wetstein;
Timing Characteristics of Large Area Picosecond Photodetectors;
Nucl. Inst. Meth. Phys. Res. A. , Vol. 795, pp 1-11 (Sept. 2015)
98. B. W. Adams, A. Elagin, J. W. Elam, H. J. Frisch, J.-F. Genat, J. S. Gregar, A. U. Mane, M. J. Minot, R. Northrop, R. Obaid, E. Oberla, A. Vostrikov, M. Wetstein;
An Internal ALD-Based High Voltage Divider and Signal Circuit for MCP-based Photodetectors;
Nucl. Instr. Meth. Phys. Res. A; Vol. 780, 107-113 (April 2015)

97. C. Aberle, A. Elagin, H.J. Frisch, M. Wetstein, L. Winslow;
Measuring Directionality in Double-Beta Decay and Neutrino Interactions with Kiloton-Scale Scintillation Detectors; JINST Vol. 9 P06012 doi:10.1088/1748-0221/9/06/P06012 (2014)
96. E. Oberla, J.-F. Genat, H. Grabas, H. Frisch, K. Nishimura, and G Varner;
A 15 GSa/s, 1.5 GHz Bandwidth Waveform Digitizing ASIC;
Nucl. Instr. Meth. A735, p452; (Jan 2014)
95. H. Grabas, R. Obaid, E. Oberla, H. Frisch J.-F. Genat, R. Northrop, F. Tang, D. McGinnis, B. Adams, and M. Wetstein;
RF Strip-line Anodes for Psec Large-area MCP-based Photodetectors;
Nucl. Instr. Meth. A71, pp124-131, (May 2013)
94. with S. Wilbur (Ph.D thesis paper), D. Krop, C. Grosso-Pilcher and the CDF Collaboration;
Search for Light New Particles via Signatures with Soft Leptons in Electroweak Final States,
Phys. Rev D 85, 092001 (2012)
93. H. Grabas, R. Obaid, E. Oberla, H. J. Frisch J.-F. Genat, R. Northrop, F. Tang, D. McGinnis, B. Adams, and M. Wetstein;
RF Strip-Line Anodes for Psec Large-Area MCP-based Photodetectors;
Nucl. Instr. Meth. A71, pp124-131, (2013)
92. with B. Auerbach (Ph.D thesis paper), A. Loginov, I. Shreyber, P. Tipton and the CDF Collaboration;
Evidence for $t\bar{t}\gamma$ Production and Measurement of $\sigma_{t\bar{t}\gamma}/\sigma_{t\bar{t}}$,
Phys. Rev. D84, 031104(R) (Aug. 2011)
91. A. Paramonov, H. J. Frisch, F. Canelli, M. D'Onofrio, and S. Mrenna;
Present Limits on the Precision of SM Predictions for Jet Energies,
Nucl. Instrum. Meth. A622 (June 2010)
90. with A. Paramonov (Ph.D thesis paper) and the CDF Collaboration;
Search for the Neutral Current Top Quark Decay $t \rightarrow Zc$ Using Ratios of $Z+4$ Jets to $W+4$ Jets Production;
Phys. Rev. D80, 052001 (Aug 2009);
89. with I. Shreyber(Ph.D thesis paper), A. Loginov, and the CDF Collaboration;
Search for Anomalous Production of Events with a Photon, Jet, b-quark Jet, and Missing Transverse Energy,
Physical Review D, Vol.80, No.1; (July 2009)
88. H. J. Frisch, J.-F. Genat, G. Varner, and F. Tang;
Pico-second Resolution Timing Measurements;
Nucl.Instrum.Meth. A607 387-393 (2009)
87. A. Abulencia et al. (the CDF Run II Collaboration);
Search for New Physics in Lepton + Photon + X Events with 929 pb⁻¹ of ppbar Collisions at $\sqrt{s} = 1.96\text{TeV}$
Phys. Rev. D **75**, 112001 (2007)
86. with A. Loginov (Ph.D thesis paper) and the CDF Collaboration;
Search for New Physics in Photon-Lepton+X Events with 305 pb⁻¹ of $\bar{p}p$ Collisions at $\sqrt{s} = 1.96\text{ TeV}$;
Phys. Rev. Lett. 97:031801 (2006)
85. M. Goncharov, T. Kamon, V. Khotilovich, V. Krutelyov, S.W. Lee, D. Toback, P. Wagner, H. Frisch, H. Sanders, M. Cordelli, F. Happacher, S. Miscetti, R. Wagner;
The Timing System for the CDF Electromagnetic Calorimeters;
Nucl.Instrum.Meth.A565:538-542 (2006)
84. D. Acosta et al., the CDF Run II Collaboration);
Search for Anomalous Production of Diphoton Events With Missing Transverse Energy at CDF and Limits on Gauge-mediated Supersymmetry-breaking Models;
Phys. Rev. D **71**, 031104 (2005)

83. M. Bogdan, H. Frisch, M. Heintz, A. Paramonov, H. Sanders, S. Chappa, R. DeMaat, R. Klein, T. Miao, P. Wilson, T. J. Phillips;
A 96-channel FPGA-based Time-to-Digital Converter;
Nucl. Instrum. Meth. A **554**, 444 (2005)
82. E. Abouzaid and H. J. Frisch
The Ratio of $W + N$ jets To $Z^0/\gamma^ + N$ jets Versus N As a Precision Test of the Standard Model*;
Phys. Rev. D **68**, 033014 (2003)
81. with J. Berryhill (Ph.D thesis paper) and the CDF Collaboration;
Search for New Physics in Photon-Lepton Events in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV ;
Phys. Rev. Lett. **89**, 041802 (2002)
80. with P. Onyisi (undergraduate Apker awardee) and the CDF Collaboration;
Limits on Extra Dimensions and New Particle Production in the Photon and Missing Energy Signature in $p\bar{p}$ Collisions at roots = 1.8 TeV at CDF;
Phys. Rev. Lett.**89**(2002) 281801
79. with D.Toback and C. Battle and the CDF Collaboration;
Search for New Heavy Particles in the WZ Final State in Proton Anti-Proton Collisions at $\sqrt{s} = 1.8$ TeV;
Phys. Rev. Lett. **88**(2002) 071806
78. with R. Culbertson and the CDF Collaboration; *Searches for New Physics in Events with a Photon and b-quark Jet at CDF*;
Phys. Rev. **D65** (2002) 052006
77. Search for Narrow Diphoton Resonances and for $\gamma\gamma + W/Z$ Signatures in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV; (with A. Castro, P. Wilson, and T. Affolder, et al.; CDF collaboration) Phys. Rev. **D64** (2001) 092002.
76. Search for the W' Boson via the Decay Mode $W' \rightarrow \mu\nu_\mu$ in 1.8 TeV $p\bar{p}$ Collisions, (with F. Abe, *et al.*) Phys. Rev. Lett. **84**, 5716 (2000)
75. Direct Measurement of the W Boson Width in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV; The CDF Collaboration with T. Affolder et al.) Phys. Rev. Lett. **85**, 3347 (2000)
74. Search for the Charged Higgs Boson in the Decays of Top Quark Pairs in the $e\tau$ and $\mu\tau$ Channels at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. **D62**, 12004 (2000)
73. Searches for New Physics in Diphoton Events in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. **D59**, 092002 (1999)
72. Search for a Technicolor Ω_T Particle in Events with a Photon and a B Quark Jet at Fermilab, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **83**, 3124-3129 (1999)
71. Measurement of the Top Quark Mass with the Collider Detector at Fermilab, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **82**, 271-276 (1999), Erratum-ibid. **82**, 2808-2809 (1999)
70. Search for Higgs Bosons Produced in Association with a Vector Boson in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **81**, 5748-5753 (1998)
69. M. Carena, R.L. Culbertson, S. Eno, H.J. Frisch, and S. Mrenna;
The Search for Supersymmetry at the Tevatron Collider;
Rev.Mod.Phys.71:937-981,1999
68. The Search for Supersymmetry at the Tevatron Collider, (with M. Carena, (Fermilab), R.L. Culbertson (UC), S. Eno (Maryland), and S. Mrenna (ANL)); in "Perspectives in Supersymmetry," edited by G.L. Kane. World Scientific (Jul 1998); ISBN: 978-981-02-3553-6
67. Searches for New Physics in Diphoton Events in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **81**, 1791-1796 (1998)
66. Measurement of the Top Quark Mass and $t\bar{t}$ Production Cross-Section from Dilepton Events at the Collider Detector at Fermilab, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **80**, 2779 (1998)

65. Measurement of the Top Quark Mass, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **80**, 2767 (1998)
64. Measurement of the $t\bar{t}$ Production Cross-Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **80**, 2773 (1998)
63. Search for First Generation Leptoquark Pair Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **79**, 4327 (1997)
62. Search for New Particles Decaying into $B\bar{B}$ Produced in Association with W Bosons Decaying into E_η or μ_η at the Tevatron, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **79**, 3819 (1997)
61. The $\mu\tau$ and $e\tau$ Decays of Top Quark Pairs Produced in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with M. Hohlmann,⁰ F. Abe et al.), Phys. Rev. Lett. **79**, 3585 (1997)
60. Forward-Backward Charge Asymmetry of Electron Pairs Above the Z^0 Pole, The CDF Collaboration (with Jeff Berryhill,⁰ F. Abe et al.), Phys. Rev. Lett. **77**, 2616 (1996)
59. Measurement of $\sigma B(W \rightarrow e\nu)$ and $\sigma B(Z^0 \rightarrow e^+e^-)$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with S. Kopp,⁰ F. Abe et al.), Phys. Rev. Lett. **76**, 3070 (1996)
58. Measurement of the Ratio $\sigma B(\bar{p}p \rightarrow W \rightarrow e\nu)/\sigma B(\bar{p}p \rightarrow Z^0 \rightarrow ee)$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with S. Kopp,⁰ F. Abe et al.), Phys. Rev. **D52**, 2624 (1995)
57. Measurement of the W Boson Mass, The CDF Collaboration (with D. Saltzberg,⁰ F. Abe et al.), Phys. Rev. Lett. **75**, 11 (1995).
56. Measurement of the W Boson Mass, The CDF Collaboration (with D. Saltzberg,⁰ F. Abe et al.), Phys. Rev. **D52**, 4784 (1995).
55. Search for Charged Bosons Heavier than the W Boson in $\bar{p}p$ Collisions at $\sqrt{s} = 1800$ GeV, The CDF Collaboration (with S. Kopp,⁰ F. Abe et al.), Phys. Rev. Lett. **74**, 2900 (1995).
54. Observation of Top Quark Production in $\bar{p}p$ Collisions with the Collider Detector at Fermilab, The CDF Collaboration (with J. Romano,⁰ F. Abe et al.), Phys. Rev. Lett. **74**, 2626 (1995).
53. Search for New Gauge Bosons Decaying into Dielectrons in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. **D51**, R949 (1995).
52. Direct Measurement of the W Boson Width, The CDF Collaboration (with S. Kopp,⁰ F. Abe et al.), Phys. Rev. Lett. **74**, 341 (1995).
51. Measurement of Drell-Yan Electron and Muon Pair Differential Cross Sections in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with K. Bloom,⁰ F. Abe et al.), Phys. Rev. **D49**, R1 (1994).
50. Search for the Top Quark Decaying to a Charged Higgs Boson in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **73**, 2667 (1994).
49. Evidence for Top Quark Production in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with J. Romano,⁰ F. Abe et al.) Phys. Rev. **D50**, 2966 (1994).
48. Evidence for Top Quark Production in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with J. Romano,⁰ F. Abe et al.), Phys. Rev. Lett. **73**, 225 (1994).
47. Measurement of the Ratio $\sigma \cdot B(W \rightarrow e\nu)/\sigma \cdot B(Z^0 \rightarrow e^+e^-)$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with S. Kopp,⁻¹ F. Abe et al.), Phys. Rev. Lett. **73**, 220 (1994).
46. Measurement of the Production and Muonic Decay Rate of W and Z Bosons in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **69**, 28 (1992).
45. Measurement of the Ratio $B(W \rightarrow \tau\nu)/B(W \rightarrow e\nu)$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, as a Test of Lepton Universality, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **68**, 3398 (1992).

⁰graduate student

⁰graduate student

44. Search for New Gauge Bosons in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **68**, 1463 (1992).
43. Search for $W' \rightarrow e\nu$ and $W' \rightarrow \mu\nu$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **67**, 2609 (1991).
42. Measurement of the e^+e^- Invariant-Mass Distribution in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with K. Bloom,⁰ F. Abe et al.), Phys. Rev. Lett. **67**, 2418 (1991).
41. Measurement of $\sigma \cdot B(W \rightarrow e\nu)$ and $\sigma \cdot B(Z^0 \rightarrow e^+e^-)$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1800$ GeV, The CDF Collaboration (with P. Derwent,⁰ F. Abe et al.), Phys. Rev. **D44**, 29 (1991).
40. A Measurement of the W-Boson Mass in 1.8-TeV $\bar{p}p$ Collisions, The CDF Collaboration (with F. Abe et al.), Phys. Rev. **D43**, 2070 (1991).
39. Measurement of the W-Boson Mass, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **65**, 2243 (1990).
38. Measurement of the Ratio $\sigma(W \rightarrow e\nu)/\sigma(Z \rightarrow ee)$ in $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with P. Derwent,⁰ F. Abe et al.), Phys. Rev. Lett. **64**, 152 (1990).
37. Search for the Top Quark in the Reaction $\bar{p}p \rightarrow$ Electron + Jets at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **64**, 142 (1990).
36. Pseudorapidity Distributions of Charged Particles Produced in $\bar{p}p$ Interactions at $\sqrt{s} = 630$ and 1800 GeV, The CDF Collaboration (with R. Snider,⁰ F. Abe et al.), Phys. Rev. **D41**, 2330 (1990).
35. A Measurement of D^* Production in Jets from $\bar{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with G. Redlinger,⁰ F. Abe et al.), Phys. Rev. Lett. **64**, 348 (1990).
34. Two Jet Invariant-Mass Distribution at $\sqrt{s} = 1.8$ TeV, The CDF Collaboration (with Y. Tsai,¹ F. Abe et al.), Phys. Rev. **D41**, 1722 (1990) as a Rapid Communication.
33. Measurement of the Mass and Width of the Z^0 Boson at the Fermilab Tevatron, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **63**, 720 (1989).
32. Measurement of W-Boson Production in 1.8-TeV $\bar{p}p$ Collisions, The CDF Collaboration (with F. Abe et al.), Phys. Rev. Lett. **62**, 1005 (1989).
31. The CDF Detector: An Overview, The CDF Collaboration (with F. Abe et al.), Nucl. Instr. and Meth. **A271**, 387 (1988).
30. A Two Level Fastbus Based Trigger System for CDF, (with D. Amidei et al.), Nucl. Instr. and Meth. **A269**, 51 (1988).
29. Transient-Response Induction Detectors for Magnetic Monopoles: First Operation at 78K, (with S. Somalwar and J. Incandela), Phys. Rev. **D37**, 2403 (1988).
28. First Results from a 1.1-m Diameter Superconducting Monopole Detector, (with J. Incandela and S. Somalwar), Phys. Rev. **D34**, 2637 (1986).
27. Production of Massive Muon Pairs in π^- -Nucleus Collisions, (with H. Greenlee et al.), Phys. Rev. Lett. **55**, 1555 (1985).
26. Flux Limit on Cosmic-Ray Magnetic Monopoles from a Large Area Induction Detector, (with M. Campbell et al.), Phys. Rev. Lett. **53**, 2067 (1984).
25. Series-Parallel Gradiometers for Monopole Detectors, (with S. Somalwar, J. Incandela, and M. Kuchnir), Nucl. Instr. and Meth., **226**, 341 (1984).

⁰undergraduate student

⁰graduate student

¹graduate student

24. The Atomic Mass Dependence of the Transverse Momentum Distribution of Massive Muon Pairs from 225 GeV/c p^- -Nucleus Collisions, (with M. Swartz et al.), Phys. Rev. Lett. **53**, 32 (1984).
23. The Inclusive Production of Hadrons at High P_T in 200 and 300 GeV π -p and π -N Collisions, (with N. Giokaris et al.), Phys. Rev. **D27**, 1001 (1983).
22. Atomic-Weight Dependence of Muon-Pair Production in 225 GeV/c π^- -Nucleus Interactions, (with N. Giokaris et al.), Phys. Rev. **D25**, 2000 (1982).
21. Comparison of the Production of Charged Hadrons at Large Transverse Momentum in π -p and pp Collisions, (with N. Giokaris et al.), Phys. Rev. Lett. **47**, 1690 (1981).
20. The Production of π^\pm , K^\pm , p and \bar{p} at Large P_T in 200 and 300 GeV π -p Collisions, (with N. Giokaris et al.), Phys. Rev. Lett. **44**, 511 (1980).
19. Measurement of the Decay Rate for the Process $K_L^0 \rightarrow \mu^+\mu^-$, (with M. Shochet et al.), Phys. Rev. **D19**, 1965 (1979).
18. Production of Hadrons at Large Transverse Momentum in 200, 300, and 400 GeV π -p and π -nucleus Collisions, (with D. Antreasyan et al.), Phys. Rev. **D19**, 764 (1979).
17. Test of Scaling in Muon-Pair Production by Hadrons, (with D. Antreasyan et al.), Phys. Rev. Lett. **39**, 906 (1977).
16. Search for Quarks Produced with Large Transverse Momentum in 400-GeV Proton-Nucleus Collisions, (with D. Antreasyan et al.), Phys. Rev. Lett. **39**, 512 (1977).
15. Measurement of the Decay Rate for the Rare Process $K^0 \rightarrow \mu^+\mu^-$, (with M. Shochet et al.), Phys. Rev. Lett. **39**, 59 (1977).
14. Measurement of the Branching Ratio $\Gamma(K_L^0 \rightarrow \pi^+\pi^-)/\Gamma(K_L^0 \rightarrow \text{all})$, (with R. Devoe et al.), Phys. Rev. **D16**, 565 (1977).
13. Atomic-Number Dependence of Large-Transverse-Momentum Hadron Production by Protons, (with L. Kluberg et al.), Phys. Rev. Lett. **38**, 670 (1977).
12. Production of Kaons, Protons and Antiprotons with Large Transverse Momentum in p-p and p-d Collisions at 200, 300, and 400 GeV, (with D. Antreasyan et al.), Phys. Rev. Lett. **38**, 115 (1977).
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10. Production of Massive Muon Pairs by 300 and 400 GeV Protons, (with L. Kluberg et al.), Phys. Rev. Lett. **37**, 1451 (1976).
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1. **End of ‘Other Publications’- see Primary Publications above**

3 Conference Proceedings

(Partial list)

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4 US Patents

4. POSITRON-EMISSION TOMOGRAPHY DETECTOR SYSTEMS BASED ON LOW-DENSITY LIQUID SCINTILLATORS AND PRECISE TIME-RESOLVING PHOTODETECTORS
Henry J. Frisch, Eric J. Oberla, Hee-Jong Kim, Minfang Yeh, Inventors
U.S. Patent Appl. US 62/146,780, April 13, 2015

3. USE OF FLAT PANEL MICROCHANNEL PHOTOMULTIPLIERS IN SAMPLING CALORIMETERS WITH TIMING;
Chin-Tu Chen, Woon-Seng Choong, Henry J. Frisch, Jean-Francois Genat, Chien-Min Kao, Heejong Kim, and Fukun Tang, Inventors;
US Provisional application 61/339,865 filed on March 9, 2010.

2. "ANODIZED ALUMINUM OXIDE WITH ATOMIC LAYER DEPOSITION AS MICRO-CHANNEL PLATE DETECTOR";
Jeffrey Elam, Hsien-Hau Wang, Michael Pellin, Karen Byrum, and Henry Frisch, Inventors;
Provisional application ANL-IN-09-017 filed Feb. 24, 2010.

1. LARGE AREA, PICO-SECOND RESOLUTION, TIME OF FLIGHT DETECTORS;
US Patent US 2007/0187596 A1; Aug 16, 2007
Henry J. Frisch, Harold Sanders, Fukun Tang, Tim Credo, Inventors