

# Publications

Andreas S. Kronfeld  
Scientist II  
Theoretical Physics Department  
Fermilab

## 1 Ph. D. Dissertation

Phenomenology in lattice gauge theory, Cornell University (May 1985, UMI-85-16965).

## 2 Refereed Papers

1. Flavor changing decays of the  $Z^0$ , *Phys. Rev. D* **27**, 570 (1983); with M. Clements, C. Footman, S. Narasimhan, and D. Photiadis.
2. Phenomenology on the lattice: composite operators in lattice gauge theory, *Phys. Rev. D* **31**, 2939 (1985); with Douglas M. Photiadis.
3. Langevin simulations of lattice field theories, *Phys. Rev. D* **32**, 2736 (1985); with G.G. Batrouni, G.R. Katz, G.P. Lepage, B. Svetitsky, and K.G. Wilson.
4. Experimental predictions of lattice and perturbative quantum chromodynamics, *Phys. Rev. Lett.* **55**, 2531 (1985); with Steven Gottlieb.
5. Lattice and perturbative QCD analysis of exclusive processes, *Phys. Rev. D* **33**, 227 (1986); with Steven Gottlieb.
6. Another higher order Langevin algorithm for QCD, *Phys. Lett. B* **172**, 93 (1986).
7. High statistics computation of the topological susceptibility of SU(2) gauge theory, *Nucl. Phys. B* **292**, 330 (1987); with M.L. Laursen, G. Schierholz, and U.-J. Wiese.
8. Topology in SU(3) lattice gauge theory: first calculation of the topological susceptibility, *Nucl. Phys. B* **292**, 349 (1987); with M. Göckeler, M.L. Laursen, G. Schierholz, and U.-J. Wiese.
9. Topology and dynamics of the confinement mechanism, *Nucl. Phys. B* **293**, 461 (1987); with G. Schierholz and U.-J. Wiese.
10. Monopole condensation and color confinement, *Phys. Lett. B* **198**, 516 (1987); with M.L. Laursen, G. Schierholz, and U.-J. Wiese.
11. Fourier acceleration I: Landau gauge fixing, *Phys. Rev. D* **37**, 1581 (1988); with C.T.H. Davies, G.G. Batrouni, G.R. Katz, G.P. Lepage, K.G. Wilson, P. Rossi, and B. Svetitsky.
12. Fourier acceleration II: matrix inversion and the quark propagator, *Phys. Rev. D* **37**, 1589 (1988); with G. Katz, C. Davies, G. Batrouni, P. Lepage, P. Rossi, B. Svetitsky, and K. Wilson.

13. An efficient method for the computation of glueball masses using the inverse of the covariant Dirac operator as a correlator, *Comput. Phys. Commun.* **52**, 1 (1988); with K.J.M. Moriarty and G. Schierholz.
14. Scaling behavior and volume dependence of the SU(2) topological susceptibility, *Nucl. Phys. B* **305** [FS23], 109 (1988); with M. Kremer, M.L. Laursen, G. Schierholz, C. Schleiermacher, and U.-J. Wiese.
15. The SU(3) topological susceptibility as a probe of scaling, *Phys. Lett. B* **209**, 315 (1988); with M. Göckeler, M.L. Laursen, G. Schierholz, and U.-J. Wiese.
16. The  $\theta$ -vacuum in SU(2) lattice gauge theory, *Nucl. Phys. B* **305** [FS23], 661 (1988); with M.L. Laursen, G. Schierholz, C. Schleiermacher, and U.-J. Wiese.
17. A vectorized code for the computation of the topological charge in SU(2) lattice gauge theory, *Comput. Phys. Commun.* **54**, 109 (1989); with M.L. Laursen, G. Schierholz, C. Schleiermacher, and U.-J. Wiese.
18. Can the topological susceptibility be calculated from SU( $N$ ) lattice gauge theories? *Phys. Lett. B* **233**, 192 (1989); with M. Göckeler, M.L. Laursen, G. Schierholz, and U.-J. Wiese.
19. Fourier acceleration III: updating field configurations, *Phys. Rev. D* **41**, 1953 (1990); with C.T.H. Davies, G.G. Batrouni, G.R. Katz, G.P. Lepage, K.G. Wilson, P. Rossi, and B. Svetitsky.
20. Critical signal-to-noise ratio and glueball mass calculations, *Nucl. Phys. B* **345**, 709 (1990); with F. Brandstaeter and G. Schierholz.
21. SU( $N$ ) gauge theories with  $C$ -periodic boundary conditions I: topological structure, *Nucl. Phys. B* **357**, 512 (1991); with U.-J. Wiese.
22. Nucleon Compton scattering in perturbative QCD, *Phys. Rev. D* **44**, 3445 (1991); with B. Nižić.
23. A determination of the strong coupling constant from the charmonium spectrum, *Phys. Rev. Lett.* **69**, 729 (1992); with Aida X. El-Khadra, George Hockney, and Paul B. Mackenzie.
24. Continuum gauge fields from lattice gauge fields, *Nucl. Phys. B* **404**, 839 (1993); with M. Göckeler, G. Schierholz, and U.-J. Wiese.
25. SU( $N$ ) gauge theories with  $C$ -periodic boundary conditions II: small volume dynamics, *Nucl. Phys. B* **401**, 190 (1993); with U.-J. Wiese.
26. Massive fermions in lattice gauge theory, *Phys. Rev. D* **55**, 3933 (1997); with Aida X. El-Khadra and Paul B. Mackenzie.
27. The light quark masses from lattice gauge theory, *Phys. Rev. Lett.* **79**, 1622 (1997); with Brian J. Gough, George M. Hockney, Aida X. El-Khadra, Paul B. Mackenzie, Bart P. Mertens, Tetsuya Onogi, and James N. Simone.
28.  $B$  and  $D$  meson decay constants in lattice QCD, *Phys. Rev. D* **58**, 014506 (1998); with Aida X. El-Khadra, Paul B. Mackenzie, Sinéad M. Ryan, and James N. Simone.

29. Self energy of massive lattice fermions, *Phys. Rev. D* **58**, 034505 (1998); with Bartholomeus P.G. Mertens and Aida X. El-Khadra.
30. Perturbative pole mass in QCD, *Phys. Rev. D* **58**, 051501 (1998).
31. Lattice QCD calculation of  $\bar{B} \rightarrow D l \nu$  decay form factors at zero recoil, *Phys. Rev. D* **61**, 014502 (2000); with Shoji Hashimoto, Aida X. El-Khadra, Paul B. Mackenzie, Sinéad M. Ryan, and James N. Simone.
32. Application of HQET to lattice QCD I: power corrections, *Phys. Rev. D* **62**, 014505 (2000).
33. Computation of  $\bar{\Lambda}$  and  $\lambda_1$  with lattice QCD, *Phys. Lett. B* **490**, 228 (2000); with James N. Simone.
34. The semileptonic decays  $B \rightarrow \pi l \nu$  and  $D \rightarrow \pi l \nu$  from lattice QCD, *Phys. Rev. D* **64**, 014502 (2001); with Aida X. El-Khadra, Paul B. Mackenzie, Sinéad M. Ryan and James N. Simone.
35.  $O(a)$  improved quark action on anisotropic lattices and perturbative renormalization of heavy-light currents, *Phys. Rev. D* **64**, 074501 (2001); with Junpei Harada, Hideo Matsufuru, Noriaki Nakajima, and Tetsuya Onogi.
36. Lattice calculation of the zero-recoil form factor of  $\bar{B} \rightarrow D^* l \bar{\nu}$ : toward a model independent determination of  $|V_{cb}|$ , *Phys. Rev. D* **66**, 014503 (2002); with Shoji Hashimoto, Paul B. Mackenzie, Sinéad M. Ryan, and James N. Simone.
37. Application of HQET to lattice QCD II: radiative corrections for heavy-light currents, *Phys. Rev. D* **65**, 094513 (2002); with Junpei Harada, Shoji Hashimoto, Ken-Ichi Ishikawa, Tetsuya Onogi, and Norikazu Yamada.
38. Application of HQET to lattice QCD III: radiative corrections for heavy-heavy currents, *Phys. Rev. D* **65**, 094514 (2002); with Junpei Harada, Shoji Hashimoto, and Tetsuya Onogi.
39. Remark on the theoretical uncertainty in  $B^0\bar{B}^0$  mixing, *Phys. Lett. B* **543**, 59 (2002); with Sinéad M. Ryan.
40. Perturbative calculation of  $O(a)$  improvement coefficients, *Phys. Rev. D* **67**, 014503 (2003); with Junpei Harada, Shoji Hashimoto, and Tetsuya Onogi.
41. High precision lattice QCD confronts experiment, *Phys. Rev. Lett.* **92**, 022001 (2004); with C.T.H. Davies, E. Follana, A. Gray, G.P. Lepage, Q. Mason, M. Nobes, J. Shigemitsu, H.D. Trottier, M. Wingate, C. Aubin, C. Bernard, T. Burch, C. DeTar, Steven Gottlieb, E.B. Gregory, U.M. Heller, J.E. Hetrick, J. Osborn, R. Sugar, D. Toussaint, M. Di Pierro, A. El-Khadra, P.B. Mackenzie, D. Menscher, and J. Simone.
42. Semileptonic decays of  $D$  mesons in three-flavor lattice QCD, *Phys. Rev. Lett.* **94**, 011601 (2005); with C. Aubin, C. Bernard, C. DeTar, M. Di Pierro, A. El-Khadra, Steven Gottlieb, E.B. Gregory, U.M. Heller, J. Hetrick, P.B. Mackenzie, D. Menscher, M. Nobes, M. Okamoto, M.B. Oktay, J. Osborn, J. Simone, R. Sugar, D. Toussaint, H.D. Trottier.
43. Mass of the  $B_c$  meson in three-flavor lattice QCD, *Phys. Rev. Lett.* **94**, 172001 (2005); with I.F. Allison, C.T.H. Davies, A. Gray, P.B. Mackenzie, and J.N. Simone.

44. Charmed-meson decay constants in three-flavor lattice QCD, *Phys. Rev. Lett.* **95**, 122002 (2005); with C. Aubin, C. Bernard, C. DeTar, M. Di Pierro, E.D. Freeland, Steven Gottlieb, U.M. Heller, J.E. Hetrick, A.X. El-Khadra, L. Levkova, P.B. Mackenzie, D. Menscher, F. Maresca, M. Nobes, M. Okamoto, D. Renner, J. Simone, R. Sugar, D. Toussaint, and H.D. Trottier.
45. Accumulating evidence for nonstandard leptonic decays of  $D_s$  mesons, *Phys. Rev. Lett.* **100**, 241802 (2008); with Bogdan A. Dobrescu.
46. New lattice action for heavy quarks, *Phys. Rev. D* **78**, 014504 (2008); with Mehmet B. Oktay.
47. The  $B \rightarrow D^* l \nu$  form factor at zero recoil from three-flavor lattice QCD: A model independent determination of  $|V_{cb}|$ , *Phys. Rev. D* **79**, 014506 (2009); with C. Bernard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, J.E. Hetrick, J. Laiho, L. Levkova, P.B. Mackenzie, M. Okamoto, J. Simone, R. Sugar, D. Toussaint, and R.S. Van de Water.
48. The  $B \rightarrow \pi l \nu$  semileptonic form factor from three-flavor lattice QCD: A model independent determination of  $|V_{ub}|$ , *Phys. Rev. D* **79**, 054507 (2009); with J. Bailey, C. Bernard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, J.E. Hetrick, J. Laiho, L. Levkova, P.B. Mackenzie, M. Okamoto, J. Simone, R. Sugar, D. Toussaint, and R.S. Van de Water.
49. Visualization of semileptonic form factors from lattice QCD, *Phys. Rev. D* **80**, 034026 (2009); with C. Bernard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, J.E. Hetrick, J. Laiho, L. Levkova, P.B. Mackenzie, M. Okamoto, M.B. Oktay, J.N. Simone, R. Sugar, D. Toussaint, and R.S. Van de Water.
50. Quarkonium mass splittings in three-flavor lattice QCD, *Phys. Rev. D* **81**, 034508 (2010); with T. Burch, C. DeTar, M. Di Pierro, A.X. El-Khadra, E.D. Freeland, Steven Gottlieb, L. Levkova, P.B. Mackenzie, and J.N. Simone.
51. Tuning Fermilab heavy quarks in 2+1 flavor lattice QCD with application to hyperfine splittings, *Phys. Rev. D* **83**, 034503 (2011); with C. Bernard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, J.E. Hetrick, J. Laiho, L. Levkova, P.B. Mackenzie, J.N. Simone, R. Sugar, D. Toussaint, and R.S. Van de Water.
52. Staggered fermions, zero modes, and flavor-singlet mesons, *Phys. Rev. D* **84**, 054504 (2011); Gordon C. Donald, Christine T.H. Davies, and Eduardo Follana.
53.  $B$ - and  $D$ -meson decay constants from three-flavor lattice QCD, *Phys. Rev. D* **85**, 114506 (2012); with A. Bazavov, C. Bernard, C. M. Bouchard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, J.E. Hetrick, R. Jain, J. Laiho, L. Levkova, P.B. Mackenzie, E.T. Neil, M.B. Oktay, J.N. Simone, R. Sugar, D. Toussaint, and R.S. Van de Water.
54.  $B_s \rightarrow D_s/B \rightarrow D$  semileptonic form-factor ratios and their application to  $\text{BR}(B_s \rightarrow \mu^+ \mu^-)$ , *Phys. Rev. D* **85**, 114502 (2012); with Jon A. Bailey, A. Bazavov, C. Bernard, C.M. Bouchard, C. DeTar, Daping Du, A.X. El-Khadra, J. Foley, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, Jongjeong Kim, J. Laiho, L. Levkova, P.B. Mackenzie, Y. Meurice, E. Neil,

M.B. Oktay, Si-Wei Qiu, J.N. Simone, R. Sugar, D. Toussaint, R.S. Van de Water, and Ran Zhou.

55. Neutral  $B$ -meson mixing from three-flavor lattice QCD: Determination of the SU(3)-breaking ratio  $\xi$ , *Phys. Rev. D* **86**, 034503 (2012); with A. Bazavov, C. Bernard, C.M. Bouchard, C. DeTar, M. Di Pierro, A.X. El-Khadra, R.T. Evans, E.D. Freeland, E. Gámiz, Steven Gottlieb U.M. Heller, J.E. Hetrick, R. Jain, J. Laiho, L. Levkova, P.B. Mackenzie, E.T. Neil, M.B. Oktay, J.N. Simone, R. Sugar, D. Toussaint, R.S. Van de Water.
56. Refining new-physics searches in  $B \rightarrow D\tau\nu$  decay with lattice QCD, *Phys. Rev. Lett.* **109**, 071802 (2012); with Jon A. Bailey, A. Bazavov, C. Bernard, C.M. Bouchard, C. DeTar, Daping Du, A.X. El-Khadra, J. Foley, E.D. Freeland, E. Gámiz, Steven Gottlieb, U.M. Heller, Jongjeong Kim, J. Laiho, L. Levkova, P.B. Mackenzie, Y. Meurice, E. T. Neil, M.B. Oktay, Si-Wei Qiu, J.N. Simone, R. Sugar, D. Toussaint, R.S. Van de Water, and Ran Zhou.

### 3 Review Papers

#### 3.1 In journals and books

1. Dynamics of Langevin simulations, *Prog. Theor. Phys. Suppl.* **111**, 293 (1993).
2. Progress in quantum chromodynamics with lattice gauge theory, *Annu. Rev. Nucl. Part. Sci.* **43**, 793 (1993); with Paul B. Mackenzie.
3. Uses of effective field theories in lattice QCD, in *At the Frontier of Particle Physics: Handbook of QCD*, Vol. IV, Chapter 39, edited by M. Shifman (World Scientific, Singapore, 2002).
4. Resource letter QCD-1: Quantum chromodynamics, *Am. J. Phys.* **78**, 1081 (2010); with Chris Quigg.
5. Twenty-first century lattice gauge theory: Results from the QCD Lagrangian, *Annu. Rev. Nucl. Part. Sci.* **62**, 265 (2012).

#### 3.2 Invited plenary review talks

1. Topological aspects of lattice gauge theory, in *Field Theory on the Lattice*, edited by A. Billoire, R. Lacaze, A. Morel, O. Napoléon, and J. Zinn-Justin; *Nucl. Phys. B (Proc. Suppl.)* **4**, 329 (1988).
2. Spectrum of the pure glue theory, in *Lattice '88*, edited by A.S. Kronfeld and P.B. Mackenzie, *Nucl. Phys. B (Proc. Suppl.)* **9**, 227 (1989); with Pierre van Baal.
3. Status of glueball mass calculations in lattice gauge theory, in *Hadron '89*, edited by F. Binon, J.-M. Frère, and J.-P. Peigneux, (Editions Frontières, Gif-sur-Yvette, 1990).
4. Lattice QCD and the Standard Model, in *Perspectives in Particle Physics '94*, proceedings of the Seventh Adriatic Meeting on Particle Physics, edited by D. Klabučar, I. Picek, and D. Tadić (World Scientific, Singapore, 1995).
5. Lattice QCD and the Standard Model, in *Theory of Elementary Particles*, edited by D. Lüst and G. Weigt, *Nucl. Phys. B (Proc. Suppl.)* **49**, 269 (1996). Also in *Particle Theory and Phenomenology*, proceedings of the XVII<sup>nd</sup> International Kazimierz Meeting on Particle Physics, edited by K.E. Lassila *et al.*

6. Lattice QCD calculations of leptonic and semileptonic decays, in *Heavy Quarks at Fixed Target*, edited by H.W.K. Cheung and J.N. Butler (AIP, New York, 1999).
7. Lattice QCD and the unitarity triangle, in *Heavy Flavor Physics 9*, edited by A. Ryd and F. C. Porter (AIP, Melville, NY, 2002).
8. Progress in lattice QCD, in *XXII<sup>nd</sup> Physics in Collision*, edited by D. Su and P. Burchat (SLAC, Menlo Park, CA, 2003).
9. Heavy quarks and lattice QCD, in *Lattice 2003*, edited by S. Aoki, S. Hashimoto, N. Ishizuka, K. Kanaya, and Y. Kuramashi, *Nucl. Phys. B (Proc. Suppl.)* **129**, 46 (2004).
10. Lattice gauge theory with staggered fermions: how, where, and why (not), *PoS LATTICE 2007*, 016 (2007).
11. Quantum chromodynamics with advanced computing, *J. Phys. Conf. Ser.* **125**, 012067 (2008).

### 3.3 Advanced schools

1. Lattice QCD, in *Perspectives in the Standard Model*, edited by R.K. Ellis, C.T. Hill, and J.D. Lykken (World Scientific, Singapore, 1992).
2. Twenty-five years of lattice gauge theory: Consequences of the QCD Lagrangian, FERMILAB-CONF-10/226-T, arXiv:1007.1444 [hep-ph], proceedings of the 25th Lake Louise Winter Institute, Lake Louise, Alberta, Canada (15–20 February 2010).

## 4 Popular Works

1. QCD: Results from lattice quantum chromodynamics, *SciDAC Rev.* **2**, 14 (2006).
2. The weight of the world is quantum chromodynamics, *Science* **322**, 1198 (2008).
3. Book Review of *The Lightness of Being: Mass, Ether, and the Unification of Forces*, by Frank Wilczek (Basic Books, New York, 2008); *Physics Today* **62**.4, 61 (April 2009).

## 5 Books Edited

1. *Lattice '88*, Proceedings of the VII<sup>th</sup> International Symposium on Lattice Field Theory, 22–25 September 1988, Fermilab, Batavia, IL, USA, published in *Nucl. Phys. B (Proc. Suppl.)* **9**; with P.B. Mackenzie.
2. *Lattice 2004*, Proceedings of the XXII<sup>nd</sup> International Symposium on Lattice Field Theory, 21–26 June 2004, Fermilab, Batavia, IL, USA, published in *Nucl. Phys. B (Proc. Suppl.)* **140**; with G. Bodwin, E. Eichten, D. Holmgren, A. El-Khadra, P. Mackenzie, M. Okamoto, J. Simone, and D. Sinclair.
3. *Lattice 2006*, Proceedings of the XXIV<sup>th</sup> International Symposium on Lattice Field Theory, July 23–28, 2006, Tucson, AZ, USA, published in *PoS LAT2006*; with T. Blum, M. Creutz, C. DeTar, F. Karsch, C. Morningstar, D. Richards, J. Shigemitsu, and D. Toussaint.

## 6 Collaborative Surveys

1. The CKM matrix and the unitarity triangle, hep-ph/0304132; CERN Yellow Report of the Workshop on the CKM Unitarity Triangle (February 13–16, 2002, CERN, Geneva); with M. Battaglia, A.J. Buras, P. Gambino, A. Stocchi (coordinators) *et al.*
2. Heavy quarkonium physics, hep-ph/0412158; with N. Brambilla, M. Krämer, R. Mussa, A. Vairo, G. Bali, G.T. Bodwin, E. Braaten, E. Eichten, S. Eidelman, S. Godfrey, A. Hoang, M. Jamin, D. Kharzeev, M.P. Lombardo, C. Lourenco, A.B. Meyer, V. Papadimitriou, C. Patrignani, M. Rosati, M.A. Sanchis-Lozano, H. Satz, J. Soto, D.Z. Besson, D. Bettoni, A. Bohrer, S. Boogert, C.-H. Chang, P. Cooper, P. Crochet, S. Datta, C. Davies, A. Deandrea, R. Faustov, T. Ferguson, R. Galik, F. Harris, O. Iouchtchenko, O. Kaczmarek, F. Karsch, M. Kienzle, V.V. Kiselev, S.R. Klein, P. Kroll, Y.-P. Kuang, V. Laporta, Jungil Lee, A. Leibovich, J.P. Ma, P. Mackenzie, L. Maiani, M.L. Mangano, A. Meyer, X.H. Mo, C. Morningstar, A. Nairz, J. Napolitano, S. Olsen, A. Penin, P. Petreczky, F. Piccinini, A. Pineda, A.D. Polosa, L. Ramello, R. Rapp, J.-M. Richard, V. Riquer, S. Ricciardi, E. Robutti, O. Schneider, E. Scomparin, J. Simone, T. Skwarnicki, G. Stancari, I.W. Stewart, Y. Sumino, T. Teubner, J. Tseng, R. Vogt, P. Wang, B. Yabsley, C.Z. Yuan, F. Zantow, Z.G. Zhao, and A. Zieminski.
3. Flavor physics in the quark sector, *Phys. Rept.* **494**, 197 (2010); with M. Antonelli, D.M. Asner, D. Bauer, T. Becher, M. Beneke, A.J. Bevan, M. Blanke, C. Bloise, M. Bona, A. Bondar, C. Bozzi, J. Brod, N. Cabibbo, A. Carbone, G. Cavoto, V. Cirigliano, M. Ciuchini, J.P. Coleman, D.P. Cronin-Hennessy, J.P. Dalseno, C.H. Davies, F. Di Lodovico, J. Dingfelder, Z. Dolezal, S. Donati, W. Dungel, U. Egede, R. Faccini, T. Feldmann, F. Ferroni, J.M. Flynn, E. Franco, M. Fujikawa, I.K. Furic, P. Gambino, E. Gardi, T.J. Gershon, S. Giagu, E. Golowich, T. Goto, C. Greub, C. Grojean, D. Guadagnoli, U.A. Haisch, R.F. Harr, A.H. Hoang, G. Isidori, D.E. Jaffe, A. Jüttner, S. Jäger, A. Khodjamirian, P. Koppenburg, R.V. Kowalewski, P. Krokovny, J. Laiho, G. Lanfranchi, T.E. Latham, J. Libby, A. Limosani, D. Lopes Pegna, C.D. Lu, V. Lubicz, E. Lunghi, V.G. Lüth, K. Maltman, W.J. Marciano, E.C. Martin, G. Martinelli, F. Martinez-Vidal, A. Masiero, V. Mateu, F. Messia, G. Mohanty, M. Moulson, M. Neubert, H. Neufeld, S. Nishida, N. Offen, M. Palutan, P. Paradisi, Z. Parsa, E. Passemar, M. Patel, B.D. Pecjak, A.A. Petrov, A. Pich, M. Pierini, B. Plaster, A. Powell, S. Prell, J. Rademaker, M. Rescigno, S. Ricciardi, P. Robbe, E. Rodrigues, M. Rotondo, R. Sacco, C.J. Schilling, O. Schneider, E.E. Scholz, B.A. Schumm, C. Schwanda, A.J. Schwartz, B. Sciascia, J. Serrano, J. Shigemitsu, I.J. Shipsey, A. Sibidanov, L. Silvestrini, F. Simonetto, S. Simula, C. Smith, A. Soni, L. Sonnenschein, V. Sordini, M. Sozzi, T. Spadaro, P. Spradlin, A. Stocchi, N. Tantalo, C. Tarantino, A.V. Telnov, D. Tonelli, I.S. Towner, K. Trabelsi, P. Urquijo, R.S. Van de Water, R.J. Van Kooten, J. Virto, G. Volpi, R. Wanke, S. Westhoff, G. Wilkinson, M. Wingate, Y. Xie, and J. Zupan.
4. Workshop on Precision Measurements of  $\alpha_s$ , FERMILAB-CONF-11/611-T, arXiv:1110.0016 [hep-ph]; with S. Bethke, A.H. Hoang, S. Kluth, J. Schieck, I.W. Stewart, S. Aoki, M. Beneke, J. Blümlein, N. Brambilla, S. Brodsky, S. Descotes-Genon, J. Erler, S. Forte, T. Gehrmann, C. Glasman, M. Golterman, S. Hashimoto, J. Kühn, G.P. Lepage, A. Martin, V. Mateu, S. Menke, Y. Nomura, C. Pahl, F. Petriello, A. Pich, K. Rabbertz, G. Salam, H. Schulz, R. Sommer, M. Steinhauser, B. Webber, C.-P. Yuan, G. Zanderighi.

## 7 Facility Studies

1. Physics goals of the QCD Teraflop Project, *Int. J. Mod. Phys.* **C2**, 829 (1991); with S. Aoki, R. Shrock, B. Berg, K. Bitar, R. Edwards, U.M. Heller, A. Kennedy, S. Sanielevici, C.W. Bernard, M. Ogilvie, D. Petcher, G. Bhanot, P. Rossi, R. Brower, J. Potvin, C. Rebbi, F.R. Brown, N.H. Christ, R. Mawhinney, C.E. DeTar, T. Draper, K.F. Liu, Steven Gottlieb, H. Hamber, G. Kilcup, J. Shigemitsu, John B. Kogut, I.-H. Lee, J.W. Negele, S. Ohta, J.C. Sexton, E.V. Shuryak, D.K. Sinclair, A. Soni, W. Wilcox [QCD Teraflop Collaboration].
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3. Semileptonic and leptonic decays of  $B$  hadrons, in the Proceedings of the 1993 Snowmass Workshop on  $B$  Physics at Hadron Accelerators, edited by P. McBride and C.S. Mishra; with K. Kinoshita, J. Amundson, C. Dib, G.W.S. Hou, V. Jain, P. Lebrun, R.J. Oakes, and J. Taron.
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