Publications co-authored by Dr. Dhiman Chakraborty

$* \Rightarrow$ major contribution

1. "Search for $B_s^0 \to \mu^+\mu^-$ at D ", V. M. Abazov *et al.*, submitted to Phys. Rev. D , xxxxxx (2007); arXiv:0707.3997; Fermilab-Pub-07/395-E.

2. "Measurement of the pp(bar)-¿WZ+X Cross Section at sqrt(s)=1.96 TeV and Limits on WWZ Trilinear Gauge Couplings", V. M. Abazov *et al.*, submitted to Phys. Rev. D , Rxxxxxx (2007); arXiv:0709.2917; Fermilab-Pub-07/488-E.

3. "Search for the lightest scalar top quark in events with two leptons in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Lett. B , xxxxxx (2007); arXiv:0707.2864; Fermilab-Pub-07/352-E.

4. "Measurement of the Λ_b Lifetime in Semileptonic Decays", V. M. Abazov *et al.*, accepted by Phys. Rev. Lett. , xxxxxx (2007); arXiv:0706.2358; Fermilab-Pub-07/205-E.

5. "Direct observation of the strange b baryon Ξ_b^-", V. M. Abazov *et al.*, Phys. Rev. Lett. **99**, 052001 (2007); arXiv:0706.1690; Fermilab-Pub-07/196-E.

6. "Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions using dilepton events", V. M. Abazov *et al.*, accepted by Phys. Rev. **D** , xxxxxx (2007); arXiv:0706.0458; Fermilab-Pub-07/143-E.

7. "Observation and properties of L=1 B_1 and B_2^* Mesons", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett. , xxxxxx (2007); arXiv:0705.3229; Fermilab-Pub-07/130-E.

*8. "Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using kinematic characteristics of lepton + jets events", V. M. Abazov *et al.*, submitted to Phys. Rev. D, xxxx (2007); arXiv:0705.2788; Fermilab-Pub-07/128-E.

   My contribution: I served on the editorial board for the analysis, which also derives heavily from the methods I developed in Run 1.

9. "Z γ production and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Lett. B 653, 378 (2007); arXiv:0705.1550; Fermilab-Pub-07/117-E.

10. "Search for third generation leptoquarks in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **99**, 061801 (2007); arXiv:0705.0812; Fermilab-Pub-07/113-E.

11. "Search for stopped gluinos from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, accepted by Phys. Rev. Lett. , xxxxxx (2007); arXiv:0705.0306; Fermilab-Pub-07/100-E.

12. "Measurement of the Λ_b lifetime in the exclusive decay $\Lambda_b \to J\psi\Lambda$", V. M. Abazov *et al.*, accepted by Phys. Rev. Lett. , xxxxxx (2007). arXiv:0704.3909; Fermilab-Pub-07/094-E.

13. "Search for a Higgs boson produced in association with a Z boson", V. M. Abazov *et al.*, accepted by Phys. Lett. B ,xxxxxx (2007); arXiv:0704.2000; Fermilab-Pub-07/076-E.

14. "Measurement of the branching fraction Br($B_s \rightarrow D_s^{(*)} D_s^{(*)}$) V. M. Abazov *et al.*,submitted to Phys. Rev. Lett. , xxxxxx (2007); hep-ex/0702049; Fermilab-Pub-07/047-E.

15. "Combined D0 Measurements Constraining CP-violating Phase and Width Difference in the B_s^0 System", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett. , xxxxxx (2007); hep-ex/0702030; Fermilab-Pub-07/044-E.

16. "Measurement of the shape of the boson rapidity distribution for $p\bar{p}rightarrow Z/\gamma^* \rightarrow eeX$, V. M. Abazov *et al.*, Phys. Rev. D **76**, 012003 (2007); hep-ex/0702025; Fermilab-Pub-07/040-E.

17. "Measurement of the top quark mass in the lepton + jets channel using the Ideogram Method", V. M. Abazov *et al.*, Phys. Rev. D **75**, 092001 (2007); hep-ex/0702018; Fermilab-Pub-07/039-E.

18. "Search for production of single top quarks via flavor-changing neutral currents at the Tevatron", V. M. Abazov *et al.*, accepted by Phys. Rev. Lett. , xxxxxx (2007); hep-ex/0702005; Fermilab-Pub-07/031-E.

19. "Lifetime difference and CP-violating phase in the B_s^0 system", V. M. Abazov *et al.*, Phys. Rev. Lett. **98** 121801 (2007); hep-ex/0101012; Fermilab-Pub-07/007-E.

20. "Measurement of the charge asymmetry in semileptonic B_s decays" V. M. Abazov *et al.*, Phys. Rev. Lett. **98**, 151801 (2007); hep-ex/0101007; Fermilab-Pub-07/005-E.

21. "Evidence for production of single top quarks and first direct measurement of $|V_{tb}|$", V. M. Abazov *et al.*, Phys. Rev. Lett. **98**, 181802 (2007); hep-ex/0612052; Fermilab-Pub-06/475-E.

22. "Search for Techniparticles Decaying into e+jets at DØ", V. M. Abazov *et al.*, V. M. Abazov *et al.*, Phys. Rev. Lett. **98**, 221801 (2007); hep-ex/0612013; Fermilab-Pub-06/450-E.

23. "Measurement of the $p\bar{p} \rightarrow t\bar{t}$ production cross section at $\sqrt{s} = 1.96$ TeV in the fully hadronic decay channel", V. M. Abazov *et al.*, accepted by Phys. Rev. D , xxxxxx (2007); Fermilab-PUB-06-426-E; hep-ex/0612040.

24. "Search for single production of scalar leptoquarks decaying into muons and quarks", V. M. Abazov *et al.*, Phys. Lett. B **647**, 74 (2007); hep-ex/0612012; Fermilab-Pub-06/455-E.

25. "Measurement of the $t\bar{t}$ Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV using secondary vertex b tagging Phys. Rev. D **74**, 112004 (2006); hep-ex/0611002; Fermilab-Pub-06/386-E.

26. "Search for the Pair Production of Scalar Top Quarks in the Acoplaner Charm Jet Final State in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **645**, 119 (2007); hep-ex/0611003; Fermilab-Pub-06/396-E.

27. "Measurement of the top quark mass in the dilepton channel", V. M. Abazov *et al.*, accepted by Phys. Lett. B , xxxxxx (2007); hep-ex/0609056; Fermilab-Pub-06/354-E.

28. "Measurement of the top quark mass in the lepton+jets final state with the matrix element method", V. M. Abazov *et al.*, Phys. Rev. D 74, 092005 (2006); hep-ex/0609053; Fermilab-Pub-06/353-E.

29. "Measurement of the W Boson Helicity in Top Quark decay at DØ" V. M. Abazov *et al.*, Phys. Rev. D Rapid. Comm. **75**, 031102(R) (2007); hep-ex/0609045; Fermilab-Pub-06/345-E.

30. "Measurement of B_d Mixing Using Opposite-side Flavor Tagging", V. M. Abazov *et al.*, Phys. Rev. D **74**, 112002 (2006); hep-ex/0609034; Fermilab-Pub-06/341-E.

31. "Measurement of the CP-violation parameter of B^0 mixing and decay in the $p\bar{p} \to \mu\mu + X$ data", V. M. Abazov *et al.*, Phys. Rev. D 74, 092001 (2006); hep-ex/0609014; Fermilab-Pub-06/327-E.

32. "Search for scalar leptoquarks in the acoplaner jet topology", V. M. Abazov *et al.*, Phys. Lett. B **640**, 233 (2006); hep-ex/0607009, FERMI-Pub-06/233-E.

33. "Search for the standard model higgs boson in the $p\bar{p} \to ZH \to \nu\bar{\nu}b\bar{b}$ channel", V. M. Abazov *et al.*, Phys. Rev. Lett. **97**, 161803 (2006), hep-ex/0607022; Fermilab-Pub-06/238-E.

34. "Measurement of the ratios of the $Z/\gamma^{*}+ \geq n$ jet production cross sections to the total inclusive Z/γ^{*} cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Lett. B, xxxxxx (2006), hep-ex/0608052; Fermilab-Pub-06/283-E.

35. "Experimental discrimination between charge 2e/3 top quark and charge 4e/3 exotic quark production scenarios", V. M. Abazov *et al.*, Phys. Rev. Lett. **98**, 041801 (2007), hep-ex/0608044; Fermilab-Pub-06/278-E.

36. "Limits on anomalous trilinear gauge couplings from $WW \to ee$, $WW \to e\mu$, and $WW \to \mu\mu$ events from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. D Brief Rep.74, 057101 (2006); hep-ex/0608011; Fermilab-Pub-06/268-E.

37. "Search for Pair Production of Scalar Bottom Quarks in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV', V. M. Abazov *et al.*, Phys. Rev. Lett. **97**, 171806 (2006); hep-ex/0608013; Fermilab-Pub-06/269-E.

38. "Search for the W' Decay in the top quark channel", V. M. Abazov *et al.*, Phys. Lett. B **641**, 423 xxxxxx (2006); hep-ex/0607102; Fermilab-Pub-06/257-E.

39. "Search for associated Higgs boson production $WH \to WWW^* \to \ell^\pm \nu \ell'^\pm \nu' + X$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **97**, 151804 (2006); hep-ex/0607032; Fermilab-Pub-06/246-E.

40. "Search for Neutral Long Lived Particles Decaying to Two Muons in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **97**, 161802 (2006); hep-ex/0607028; Fermilab-Pub-06/245-E.

41. "Search for Heavy Resonance Decaying into a Z+jet Final State in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV using the DØ Detector", V. M. Abazov *et al.*, submitted to Phys. Rev. D;

42. "Search for Resonant 2nd Generation Slepton Production at the Tevatron", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett. (2006);

43. "A Precise Measurement of the B_s^0 Lifetime", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett (2006);

*44. "Search for Neutral Higgs Bosons Decaying to tau pairs in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett. (2006);

My contribution: From 2001 to 2005 I co-led the τ particle identification group at DØ, which made this first measurement of its kind from the Tevatron possible. I also introduced the use of artificial neural networks for τ identification, which forms the basis of this analysis.

45. "Search for R-parity Violating Supersymmetry via the LLE Couplings Λ_{121}, Λ_{122}, or Λ_{133} in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Lett. B;

46. "Search for Particles Decaying to a Z Boson and a Photon in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Lett. B , (2006);

47. "Search for Excited Muons in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, accepted by Phys. Rev. D (Rapid Communications) , (2006);

48. "Search for Squarks and Gluinos in Events with Jets and Missing Transverse Energy in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, accepted by Phys. Lett. B;

49. "Multivariate searches for single top quark production with the DZero detector", V. M. Abazov *et al.*, submitted to Phys. Rev. D ,

50. "Search for the Rare Decay $B_s^0 \to \phi\mu^+\mu-$ with the DØ Detector", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett.

51. "Measurement of $B(t \to bW)/B(t \to qW)$ at $\sqrt{(s)} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Rev. Lett.

52. "Direct Limits on B_s^0 Oscillation Frequency", V. M. Abazov *et al.*, accepted by Phys. Rev. Lett.;

53. "Search for Pair Production of Second Generation Leptoquarks in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **636**, 183 (2006);

54. "Measurement of the isolated photon cross section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, submitted to Phys. Lett. B;

55. "Search for the Higgs Boson in $H \to WW^*$ Decays in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **96**, 011801 (2006);

*56. "The Upgraded DØ Detector", V. M. Abazov *et al.*, accepted by Nucl. Instr. and Methods,

My contribution: I contributed to the design of the Forward Preshower Detector, an important component of the DØ detector upgrade for Run 2.

*57. "Investigation of a Solid-state Photodetector", D. Beznosko *et al.*, Nucl. Instr. and Methods **A545**, 727 (2005).

My contribution: A particular kind of Solid-state Photodetectors, called "Silicon PhotoMultipliers" (SiPM), are a key component at the heart of the R&D program described above. Recent emergence of SiPMs has helped us overcome the many difficulties with other types of photon detectors that would have negated the viability of the scintillator option for the proposed ILC hadronic calorimeter in the past. The detailed characterization performed by our group established that SiPMs can meet the stringent criteria required for the application, which, if chosen, will require a federal investment in excess of $100 million.

58. "Measurement of the lifetime difference in the B_s system", V. M. Abazov *et al.*, Phys. Rev. Lett. **95**, 171801 (2005);

59. "Measurement of semileptonic branching fractions of B mesons to narrow D^{**} states", V. M. Abazov *et al.*, Phys. Rev. Lett. **95** 171803 (2005);

60. "Search for large extra spatial dimensions in dimuon production at DØ", V. M. Abazov *et al.*, Phys. Rev. Lett. **95** 161602 (2005);

61. "Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV in dilepton final states", V. M. Abazov *et al.*, Phys. Lett. B **626**, 55 (2005);

62. "Search for single top quark production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **622** 265-276 (2005);

63. "Search for right-handed W bosons in top quark decay", V. M. Abazov *et al.*, Phys. Rev. D Rap. Comm **72**, 011104 (R) (2005);

64. "Search for Randall-Sundrum Gravitons in Dilepton and Diphoton Final States", V. M. Abazov *et al.*, Phys. Rev. Lett. **95**, 091801 (2005);

65. "Search for supersymmetry via associated production of charginos and neutralinos using trilepton final states", V. M. Abazov *et al.*, Phys. Rev. Lett. **95** 151805 (2005);

66. “Measurement of the $t\bar{t}$ cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using lepton plus jets events with lifetime b-tagging”, V. M. Abazov *et al.*, Phys. Lett. B **626**, 35 (2005);

*67. “Measurement of the $t\bar{t}$ cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using kinematic characteristics of lepton plus jet events”, V. M. Abazov *et al.*, Phys. Lett. B **626**, 45 (2005);

My contribution: This is an extension of my thesis research. Presently I am a member of the editorial board for this analysis. (An *editorial board* is an internal review committee appointed by the spokespersons to guide each DØanalysis from its initial working group acceptance through full collaboration review.)

68. “Search for neutral supersymmetric Higgs boson in multijet events at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett. **95**, 151801 (2005);

69. “Production of WZ Events in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV and Limits on Anomalous WWZ Couplings”, V. M. Abazov *et al.*, Phys. Rev. Lett. **95** 141802, (2005);

70. “Measurement of the $p\bar{p} \to W\gamma + X$ Cross section and Limits on Anomalous $WW\gamma$ Couplings at $\sqrt{(s)} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. D Rap. Comm. **71**, 091108 (2005);

71. “Measurement of inclusive differential cross sections for $\Upsilon(1S)$ production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett., **232001** (2005);

72. “Study of $Z\gamma$ events and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings in $p\bar{p}$ collisions at $\sqrt{(s)} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett. **95**, 051802 (2005);

73. “Search for first-generation scalar leptoquarks in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. D Rap. Comm. **71**, 071104(R)(2005);

*74. “First measurement of $\sigma(p\bar{p} \to Z)B(Z \to \tau\tau)$ at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. D **71**, 072004 (2005);

My contribution: Same as the ”Search for Neutral Higgs Bosons Decaying to tau pairs in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV”, paper above.

75. “A search for anomalous heavy-flavor quark production in association with W bosons”, V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 152002 (2005);

76. “A Measurement of the Ratio of Inclusive Cross Sections $p\bar{p} \to Zb/p\bar{p} \to Zj$ at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 161801 (2005);

77. “Measurement of the WW Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 151801 (2005);

78. “A Search for $Wb\bar{b}$ and WH Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV”, V. M. Abazov *et al.*, Phys. Rev. Lett. **94** 091802 (2005);

79. “Measurement of the Λ_b Lifetime in the Decay $\Lambda_b \to J/\psi\Lambda$ with the DØ Detector”, V. M. Abazov *et al.*, Phys. Rev. Lett. **94** 102001 (2005);

80. "Measurement of the Ratio of B^+ and B_0 Lifetimes", V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 182001 (2005);

81. "A Search for the Flavor-Changing Neutral Current Decay $B_s^0 \to \mu^+\mu^-$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 071802 (2005);

82. "Measurement of the B_s^0 Lifetime in the Exclusive Decay Channel $B_s^0 \to J/\psi\phi$", V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 042001 (2005);

83. "Measurement of Dijet Azimuthal Decorrelations at Central Rapidities in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 221801 (2005);

84. "Search for Supersymmetry with Gauge-Mediated Breaking in Diphoton Events at DØ", V. M. Abazov *et al.*, Phys. Rev. Lett. **94**, 041801 (2005);

*85. "Small scintillating cells as the active elements in a digital hadron calorimeter for the e^+e^- linear collider" A. Dyshkant *et al.*, J. Phys. G. **30**, N1-N16 (2004),

My contribution: This is a pioneering work being done by the Experimental High Energy Physics group at NIU, simultaneously with and independently of a group in Europe. The work, which has drawn praise in peer review and attracted healthy federal funding, is widely considered the strongest candidate in a field of three. This hardware R&D, together with extensive simulation and development of pattern-recognition algorithms to make the best use of it forms a coherent research program that has been of the highest priority to the NIU group since 2002.

86. "Observation and Properties of the $X(3872)$ Decaying to $J/psi\pi^+\pi^-$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **93**, 162004 (2004);

87. "Search for Doubly-charged Higgs Boson Production in the Decay $H^{++}H^{--} \to \mu^+\mu^+\mu^-\mu^-$ with the DØ Detector at $\sqrt{s} = 1.96$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett **93**, 141801 (2004);

*88. "Measurement of the Top Quark Mass in Alljets Events", V. M. Abazov *et al.*, Phys. Lett. B **606**, 25 (2005);

My contribution: I led the working group that oversaw the initial phase this analysis. I also chaired the editorial board.

89. "Combination of CDF and DØ results on W boson mass and width", V. M. Abazov *et al.*, Phys. Rev. D **70**, 092008 (2004);

*90. "Helicity of the W Boson in Lepton + Jets $t\bar{t}$ Events", V. M. Abazov *et al.*, Phys. Lett. B **617**, 1 (2005);

My contribution: I led the working group that initiated this analysis.

91. "Search for Pair Production of Light Scalar Top Quarks in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **93**, 011801, (2004);

*92. "Improved Measurement of the Top Quark Mass", V. M. Abazov *et al.*, Nature **429**, 638 (2004);

My contribution: I led the working group that oversaw the initial phase of this analysis, one of the most important from DØ.

93. "Search for New Particles in the Two-Jet Decay Channel with the DØ Detector", V. M. Abazov *et al.*, Phys. Rev. D Rapid Comm. **69**, 111101 (2004);

94. "Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton-Antiproton Collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **581**, 144 (2004);

95. "Observation of diffractively produced W and Z bosons in $\overline{p}p$ Collisions at $\sqrt{(s)} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Lett. B **574**, 169 (2003);

*96. "Search for Narrow $t\bar{t}$ Resonances in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **92**, 221801 (2004);

My contribution: I worked closely with the graduate student who was the primary author. Also led the working group that oversaw this analysis.

97. "Search for large extra dimensions in the monojet + $\not{E}_T$ channel with the DØ detector", V. M. Abazov *et al.*, Phys. Rev. Lett. **90**, 251802 (2003);

98. "Multiple jet production at low transverse energies in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. D **67**, 052001 (2003);

*99. "$t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. D **67**, 012004 (2003);

My contribution: My thesis analysis and its continuation formed an important part of this final paper on the Run 1 "cross section" series.

100. "Search for mSUGRA in single electron events with jets and large missing transverse energy in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, V. M. Abazov *et al.*, Phys. Rev. D **66**, 112001 (2002);

101. "Improved W boson mass measurement with the DØ detector", V. M. Abazov *et al.*, Phys. Rev. D **66**, 012001 (2002);

102. "A direct measurement of the W boson width", V. M. Abazov *et al.*, Phys. Rev. D **66**, 032008 (2002);

103. "Search for Leptoquark Pairs Decaying to $\nu\nu+$ jets in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 191801 (2002);

103. "Search for R-parity Violating Supersymmetry in Dimuon and Four-Jets Channel", V. M. Abazov *et al.*, Phys. Rev. Lett. **89**, 171801 (2002),

104. "The inclusive jet cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV using the k_T algorithm", V. M. Abazov *et al.*, Phys. Lett. B **525**, 211 (2002);

105. "Subjet multiplicity of gluon and quark jets reconstructed using the k_T algorithm in $p\bar{p}$ collisions", V. M. Abazov *et al.*, Phys. Rev. D **65**, 052008 (2002);

106. "The ratio of isolated photon cross sections in $p\bar{p}$ collisions at $\sqrt{s} = 630$ and 1800 GeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 251805 (2001);

107. "A search for the scalar top quark in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 171802 (2002);

108. "Measurement of the ratio of differential cross sections for W and Z boson production as a function of transverse momentum", V. M. Abazov *et al.*, Phys. Lett. B. **517**, 299 (2001);

109. "Search for Single Top Production at DZero Using Neural Networks", V. M. Abazov *et al.*, Phys. Lett. B **517**, 282 (2001);

110. "Search for New Physics Using QUAERO: A General Interface to DZero Data", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 012004 (2001);

111. "Search for First-Generation Scalar and Vector Leptoquarks", V. M. Abazov *et al.*, Phys. Rev. D **64**, 092004 (2001);

*112. "Direct Search for Charged Higgs Bosons in Decays of Top Quarks", V. M. Abazov *et al.*, Phys. Rev. Lett. **88**, 151803 (2002);

My contribution: I performed this analysis together with a graduate student. Also led the working group that oversaw this analysis.

113. "Search for Heavy Particles Decaying into Electron-Positron Pairs in $p\bar{p}$ Collisions", V. M. Abazov *et al.*, Phys. Rev. Lett. **87**, 061802 (2001);

114. "High-p_T Jets in $p\bar{p}$ Collisions at $\sqrt{s} = 630$ and 1800 GeV", B. Abbott *et al.*, Phys. Rev. D **64**, 032003 (2001);

115. "A Quasi-Model Independent Search for New Physics at Large Transverse Momentum", B. Abbott *et al.*, Phys. Rev. D 64, 012004 (2001);

116. "A Quasi-Model-Independent Search for New High pT Physics at DZero", B. Abbott *et al.*, Phys. Rev. Lett. **86**, 3712 (2001);

117. "Inclusive jet production in $p\bar{p}$ collisions", B. Abbott *et al.*, Phys. Rev. Lett. **86** 1707 (2001);

118. "Differential Cross Section for W Boson Production as a function of Transverse Momentum in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Lett. B **513**, 292 (2001);

119. "Measurement of the Angular Distribution of Electrons from $W \rightarrow e\nu$ Decays Observed in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D **63** 072001 (2001);

120. "Ratios of Multijet Collisions in $p\bar{p}$ Collisions at $\sqrt{(s)}$=1800 GeV", B. Abbott *et al.*, Phys. Rev. Lett. **86** 1955 (2001);

121. "The ratio of jet cross sections at $\sqrt{(s)}$=630 and 1800 GeV", B. Abbott *et al.*, Phys. Rev. Lett. **86**, 2523 (2001);

122. "Search for Large Extra Dimensions in Dielectron and Diphoton Production", B. Abbott *et al.*, Phys. Rev. Lett. **86** 1156 (2001);

123. "Cross Section for b jet production in $\overline{p}p$ collisions at $\sqrt{(s)} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **85**, 5068 (2000);

*124. "Search for Electroweak Production of Single Top Quarks in $\overline{p}p$ Collisions", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **63** 031101 (2001);

My contribution: I led the working group that oversaw this analysis.

125. "Search for New Physics in $e\mu X$ Data at DØ Using Sleuth: A Quasi-Model-Independent Search Strategy for New Physics", B. Abbott *et al.*, Phys. Rev. D **62**, 92004 (2000);

126. "Search for R-parity Violation in Multilepton Final States in pbarp Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **62**, 071701 (2000);

*127. "Spin Correlation in $t\bar{t}$ Production from $p\bar{p}$ Collisions at $\sqrt{s} = 1800$ GeV", B. Abbott *et al.*, Phys. Rev. Lett. **85**, 256 (2000),

My contribution: I led the working group that oversaw this analysis.

128. "A Search for Dilepton Signatures from Minimal Low-energy Supergravity in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **63**, 091102 (2001);

129. "Limits on Quark Compositeness from High Energy Jets in $p\bar{p}$ Collisions at 630 and 1800 GeV", B. Abbott *et al.*, Phys. Rev. D Rapid Comm. **62**, 031101 (2000);

130. "Hard Single Diffraction in $p\bar{p}$ Collisions at $\sqrt{s} = 630$ and 1800 GeV", B. Abbott *et al.*, Phys. Lett. B **531**, 52 (2002);

131. "A measurement of the $W \rightarrow \tau\nu$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 5710 (2000);

132. "Limits on Anomalous $WW\gamma$ and WWZ Couplings from $WW/WZ \rightarrow e\nu$jj Production", B. Abbott *et al.*, Phys. Rev. D **62**, 052005 (2000);

133. "Probing BFKL Dynamics in Dijet Cross Section at Large Rapidity Intervals in $p\bar{p}$ Collisions at $\sqrt{s} = 1800$ and 630 GeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 5722 (2000);

134. "The isolated photon cross section in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 2786 (2000); Fermilab-Pub-99/354-E; hep-ex/9912017.

135. "Search for second generation leptoquarks in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*,Phys. Rev. Lett. **84**, 2088 (2000); Fermilab-Pub-99/314-E; hep-ex/9910040.

136. "A measurement of the W boson mass using electrons at large rapidities", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 222 (2000);

137. "Differential production cross section of Z bosons as a function of transverse momentum at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 2792 (2000);

138. "A measurement of the W boson mass using large rapidity electrons", B. Abbott *et al.*, Phys. Rev. D **62** 092006 (2000);

139. "Small angle muon and bottom quark production in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **84**, 5478 (2000);

140. "Measurement of the inclusive differential cross section for Z bosons as a function of transverse momentum produced in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D **61**, 032004 (2000);

141. "Extraction of the width of the W boson from measurements of $\sigma(p\bar{p} \to W + X) \times \mathrm{Br}(W \to e\nu)$ and $\sigma(p\bar{p} \to Z + X) \times \mathrm{Br}(Z \to ee)$ and their ratio", B. Abbott *et al.*, Phys. Rev. D **61**, 072001 (2000);

142. "The $b\bar{b}$ production cross section and angular correlations in $\overline{p}p$ collisons at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Lett. B **487**, 264 (2000);

143. "Search for R-parity violation supersymmetry in the dielectron channel", B. Abbott *et al.*, Phys. Rev. Lett. **83**, 4476 (1999);

144. "Search for second generation leptoquark pairs decaying into $\mu\nu+$ jets in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **83**, 2896 (1999);

145. "Evidence of color coherence effects in W+jets events from $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Lett. B **464**, 145 (1999);

146. "Studies of WW and WZ production and limits on anomalous $WW\gamma$ and WWZ couplings", B. Abbott *et al.*, Phys. Rev. D **60**, 072002 (1999);

147. "Search for squarks and gluinos in events containing jets and a large imbalance in transverse momentum", B. Abbott *et al.*, Phys. Rev. Lett. **83**,4937 (1999);

148. "Measurement of the top quark pair production cross section in the all-jets decay channel", B. Abbott *et al.*, Phys. Rev. Lett. **83**, 1908 (1999);

149. "Search for bottom squarks in $\overline{p}p$ collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. D **60** Rapid Communications, 031101 (1999);

*150. "Search for charged Higgs bosons in decays of top quark pairs", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 4975 (1999);

My contribution: I performed this analysis. Also led the working group that oversaw this analysis and a few others.

151. "Measurement of W and Z boson production cross sections (Run 1a)", B. Abbott *et al.*, Phys. Rev. D **60**, 052003 (1999);

152. "Measurement of high-mass Drell-Yan cross section and limits on quark-electron compositeness scales", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 4769 (1999);

153. "Search for nonstandard Higgs bosons using high mass photon pairs in $\overline{p}p \to \gamma\gamma + 2$ jets at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2244 (1999);

154. "Probing hard color-singlet exchange in $\overline{p}p$ collisions at $\sqrt{s}$=630 GeV and 1800 GeV.", B. Abbott *et al.*, Phys. Lett. B **440**, 189 (1998);

155. "Measurement of the Top Quark Pair Production Cross Section in $\overline{p}p$ Collisions using Multijet Final States", B. Abbott *et al.*, Phys. Rev. D **60**, 012001 (1999);

156. "Search for Squarks and Gluinos in Single-Photon Events with Jets and Large Missing Transverse Energy in $\overline{p}p$ Collision at $\sqrt{s}$=1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 29 (1999);

157. "Measurement of the Top Quark Mass in the Dilepton Channel", B. Abbott *et al.*, Phys. Rev. D **60**, 052001 (1999);

158. "Small Angle J/Psi Production in $\overline{p}p$ Collisions at $\sqrt{s}$=1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 35 (1999);

159. "The Inclusive Jet Cross Section in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2451 (1999);

160. "The Dijet Mass Spectrum and a Search for Quark Compositeness in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **82**, 2457 1999;

161. "Determination of the Absolute Jet Energy Scale in the DØ Calorimeters", B. Abbott *et al.*, Nucl. Instrum. Methods Phys. Res. A**424**, 352 (1999);

162. "Search for Heavy Pointlike Dirac Monopoles", B. Abbott *et al.*, Phys. Rev. Lett. **81**, 524 (1998);

163. "Limits on anomalous $WW\gamma$ and WWZ couplings", B. Abbott *et al.*, Phys. Rev. D **58** Rapid Communications, 031102 (1998);

164. "Search for Charge–1/3 Third Generation Leptoquarks in $\overline{p}p$ Collisions at $\sqrt{s}$= 1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **81**, 38 (1998);

165. "Limits on $WW\gamma$ and WWZ couplings from W boson pair production", B. Abbott *et al.*, Phys. Rev. D **58** Rapid Communications, 051101 (1998);

166. "Measurement of the Shape of the Transverse Momentum Distribution of W Bosons Produced in $\overline{p}p$ Collisions at $\sqrt{s}$= 1.8 TeV", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 5498 (1998);

167. "Search for the decay $b \to X_s\mu^+\mu^-$", B. Abbott *et al.*, Phys. Lett. B **423**, 419, 1998;

*168. "Direct measurement of the top quark mass by the DØ Collaboration", B. Abbott *et al.*, Phys. Rev. D **58**, 052001 (1998);

My contribution: This is a more detailed version of the first "top mass" letter listed below.

169. "A measurement of the W boson mass", B. Abbott *et al.*, Phys. Rev. D **58**, 092003 (1998);

170. "A Measurement of the W Boson Mass at the Fermilab $p\bar{p}$ Collider", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 3008 (1998);

171. "Search for First Generation Scalar Leptoquark Pairs in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 2051 (1998);

172. "$Z\gamma$ production in $\overline{p}p$ collisions at $\sqrt{s}$=1.8 TeV and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings", B. Abbott *et al.*, Phys. Rev. D **57** Rapid Communications, 3817 (1998);

173. "Determination of the mass of the W boson using the DØ detector at the Tevatron", B. Abbott *et al.*, Phys. Rev. D **58**, 012002 (1998);

174. "Experimental Search for Chargino and Neutralino Production in Supersymmetry Models with a Light Gravitino", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 442 (1998);

175. "Search for Scalar Leptoquark Pairs Decaying to Electrons and Jets in $\overline{p}p$ Collisions", B. Abbott *et al.*, Phys. Rev. Lett. **79**, 4321 (1997);

176. "Measurement of Dijet Angular Distributions and Search for Quark Compositeness", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 666 (1998);

*177. "Measurement of the Top Quark Mass Using Dilepton Events", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 2063 (1998);

My contribution: I worked on background modeling.

178. "Color coherent radiation in multijet events from $\overline{p}p$ collisions at $\sqrt{s}$= 1.8 TeV", B.Abbott *et al.*, Phys. Lett. B **414**, 419 (1997);

179. "Search for Trilepton Signatures from Associated Gaugino Pair Production", B. Abbott *et al.*, Phys. Rev. Lett. **80**, 1591 (1998);

180. "Limits on WWZ and $WW\gamma$ couplings from $\overline{p}p \to e\nu jjX$ events at $\sqrt{s} = 1.8$ TeV", B. Abbott *et al.*, Phys. Rev. Lett. **79**, 1441 (1997);

*181. "Measurement of the Top Quark Pair Production Cross Section in $\overline{p}p$ Collisions", S. Abachi *et al.*, Phys. Rev. Lett. **79**, 1203 (1997);

My contribution: This is a continuation of the "observation" work listed above. The result is improved by using a larger volume of data and more refined analysis techniques.

182. "Studies of Gauge Boson Pair Production and Trilinear Couplings", S. Abachi *et al.*, Phys. Rev. D **56**, 6742 (1997);

*183. "Direct Measurement of the Top Quark Mass", S. Abachi *et al.*, Phys. Rev. Lett. **79**, 1197 (1997);

My contribution: I contributed to background modeling and finding discriminators to optimize signal significance.

184. "Study of the $ZZ\gamma$ and $Z\gamma\gamma$ Couplings in $Z\gamma \rightarrow \nu\nu\gamma$ Production", S. Abachi *et al.*, Phys. Rev. Lett. **78**, 3640 (1997);

185. "Search for Top Squark Pair Production in the Dielectron Channel", S. Abachi *et al.*, Phys. Rev. D **57**, 589 (1998);

186. "Search for Diphoton Events with Large Missing Transverse Energy in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **78**, 2070 (1997);

187. "Search for a Fourth Generation Charge -1/3 Quark via Flavor-Changing Neutral Current Decay", S. Abachi *et al.*, Phys. Rev.Lett. **78**, 3818 (1997);

188. "Limits on Anomalous $WW\gamma$ Couplings from $\overline{p}\rightarrow W\gamma + X$ Events at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **78**, 3634 (1997);

189. "The Isolated Photon Cross Section in the Central and Forward Rapidity Region in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **77**, 5011 (1996);

190. "Search for Additional Neutral Gauge Bosons", S. Abachi *et al.*, Phys. Lett. B **385**, 471 (1996);

191. "Measurement of the W Boson Mass", S. Abachi *et al.*, Phys. Rev. Lett. **77**, 3309 (1996);

192. "Search for Anomalous WW and WZ Production in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **77**, 3303 (1996);

193. "The Azimuthal Decorrelation of Jets Widely Separated in Rapidity", S. Abachi *et al.*, Phys. Rev. Lett. **77**, 595 (1996);

194. "J/Ψ Production in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Lett. B **370**, 239 (1996);

*195. "Search for Light Top Squarks in $\overline{p}p$ Collisions at 1.8 TeV", S. Abachi *et al.*, Phys. Rev. Lett. **76**, 2222 (1996);

My contribution: I led the working group that oversaw this analysis.

196. "Search for Right-Handed W Bosons and Heavy W′ in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **76**, 3271 (1996);

197. "Search for $\widetilde{W_1}\widetilde{Z_2}$ via Trilepton Final States in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **76**, 2228 (1996);

198. "Jet Production via Strongly-Interacting Color-Singlet Exchange in $\overline{p}p$ Collisons" S. Abachi *et al.*, Phys. Rev. Lett. **76**, 734 (1996);

199. "Studies of Topological Distributions of Inclusive Three- and Four-Jet Events in $\overline{p}p$ Collisions at $\sqrt{s}$= 1800 GeV with the DØ Detector", S. Abachi *et al.*, Phys. Rev. D **53**, 6000 (1996);

200. "Second Generation Leptoquark Search in $\overline{p}p$ Collisions at 1.8 TeV", S. Abachi *et al.*, Phys. Rev. Lett. **75**, 3618 (1995);

201. “Search for Heavy W Bosons in 1.8 TeV $\overline{p}p$ Collisions”, S. Abachi *et al.*, Phys. Lett. B **358**, 405 (1995);

202. “Transverse Energy Distributions within Jets in $\overline{p}p$ Collisions at 1.8 TeV”, S. Abachi *et al.*, Phys. Lett. B **357**, 500 (1995);

*203. “Top Quark Search with the DØ 1992 – 93 Data Sample”, S. Abachi *et al.*, Phys. Rev. D**52**, 4877 (1995);

My contribution: This is a more detailed version of the “search” letters listed below.

*204. “A Study of the Strong Coupling Constant Using W + Jets Processes”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 3226 (1995);

My contribution: I studied these processes in detail as they were the most serious background to my signal. I was in charge of porting and tuning the simulation program used to model these processes, and for producing large samples of such simulated events for the entire collaboration.

205. “W and Z Boson Production in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1456 (1995);

206. “Measurement of the $WW\gamma$ Gauge Boson Coupling in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1034 (1995);

207. “Limits on the Anomalous $ZZ\gamma$ and $Z\gamma\gamma$ Couplings in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1028 (1995);

208. “Search for W Boson Pair Production in $\overline{p}p$ Collisions at at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1023 (1995);

209. “Search for Squarks and Gluinos in $\overline{p}p$ Collisions at at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **75**, 618 (1995);

210. “Inclusive μ and b-Quark Production Cross Sections in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **74**, 3548 (1995);

*211. “Observation of the Top Quark”, S. Abachi *et al.*, Phys Rev. Lett. **74**, 2632 (1995);

My contribution: This paper, an important milestone in High Energy Physics, draws heavily on the continuation of my thesis research.

*212. “Search for High Mass Top Quark Production in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **74**, 2422 (1995);

My contribution: My thesis research forms a large part of this paper.

*213. “Rapidity Gaps between Jets in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **72**, 2332 (1994);

My contribution: I chaired the editorial board for this paper.

*214. “Search for the Top Quark in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV”, S. Abachi *et al.*, Phys. Rev. Lett. **72**, 2138 (1994);

My contribution: My thesis research forms a large part of this paper.

215. "First Generation Leptoquark Search in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV", S. Abachi *et al.*, Phys. Rev. Lett. **72**, 965 (1994);

*216. "The DØ Detector", S. Abachi *et al.*, Nucl. Instrum. Methods Phys. Res. A**338**, 185 (1994);

My contribution: I was involved in the commissioning and online monitoring of the Central Drift Chamber, which was a key component of the DØ detector in Run 1 (1991-1996). I also contributed to several aspects of calorimeter reconstruction software.

217. "Beam Tests of the DØ Uranium Liquid Argon End Calorimeters", S. Abachi *et al.*, Nucl. Instrum. Methods Phys. Res. A**324**, 53-76 (1993).