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**Invi ted Lect ures:**

- Fermi National Accelerator Laboratory (3), March 1993
- Argonne National Laboratory (1), March 1993
- Universidad de los Andes (2), April 1994

**List of Scientific Publications**

- “Production of Leptons in Coincidence with Prompt Muons,” Phys. Rev. Lett. **53**, 1411 (1984).
- “Search for Charmed Mesons Produced in Hadronic Interactions,” G. Ginther *et al.*, Phys. Rev. D**35**, 1541 (1987).
- “Inclusive Charged-D\* Production in 205 GeV/c  $\pi^-$  Be Interactions,” P. Mooney *et al.*, Phys. Rev. D**39**, 2494 (1989).
- “Inclusive Neutral D Production in 205 GeV/c  $\pi^-$  Be Interactions,” M. Sarmiento *et al.*, Phys. Rev. D**45**, 2244 (1992).
- “Hadron and Electron Response of Uranium Liquid Argon Calorimeter Modules for the DØ Detector,” M. Abolins *et al.*, Nucl. Instr. and Meth. A**280**, 36 (1989).
- “Beam Tests of the DØ Uranium Liquid argon End Calorimeters,” S. Abachi *et al.*, Nucl. Instr. and Meth. A**324**, 53 (1993).
- “The DØ Detector,” S. Abachi *et al.*, Nucl. Instr. and Meth. A**338**, 185 (1994).
- “First Generation Leptoquark Search in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **72**, 965 (1994).
- “Search for the Top Quark in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **72**, 2138 (1994).
- “Rapidity Gaps between Jets in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **72**, 2332 (1994).
- “Search for High Mass Top Quark Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **74**, 2422 (1995).
- “Observation of the Top Quark,” S. Abachi *et al.*, Phys. Rev. Lett. **74**, 2632 (1995).
- “Inclusive  $\mu$  and b-Quark Production Cross Sections in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **74**, 3548 (1995).
- “Search for Squarks and Gluinos in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 618 (1995).
- “Search for W Boson Pair Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1023 (1995).
- “Measurement of the Anomalous  $ZZ\gamma$  and  $Z\gamma\gamma$  Couplings in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1028 (1995).

- “Measurement of the  $WW\gamma$  Gauge Boson Coupling in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1034 (1995).
- “W and Z Boson Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 1456 (1995).
- “A Study of the Strong Coupling Constant Using W + Jets Processes,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 3226 (1995).
- “Top Quark Search with the DØ 1992 — 93 Data Sample,” S. Abachi *et al.*, Phys. Rev. **D52**, 4877 (1995).
- “Transverse Energy Distributions within Jets in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Lett. **B357**, 500 (1995).
- “Search for Heavy W Bosons in 1.8 TeV  $\bar{p}p$  Collisions,” S. Abachi *et al.*, Phys. Lett. **B358**, 405 (1995).
- “Second Generation Leptoquark Search in  $\bar{p}p$  Collisions at 1.8 TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **75**, 3618 (1995).
- “Studies of Topological Distributions of Inclusive Three- and Four-Jet Events in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1800$  GeV with the DØ Detector,” S. Abachi *et al.*, Phys. Rev. **D53**, 6000 (1996).
- “Jet Production via Strongly-Interacting Color-Singlet Exchange in  $\bar{p}p$  Collisions,” S. Abachi *et al.*, Phys. Rev. Lett. **76**, 734 (1996).
- “Search for  $\tilde{W}_1\tilde{Z}_2$  Production via Trilepton Final States in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **76**, 2228 (1996).
- “Search for Right-Handed W Bosons and Heavy  $W'$  in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **76**, 3271 (1996).
- “Search for Light Top Squarks in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **76**, 2222 (1996).
- “ $J/\Psi$  Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Lett. **B370**, 239 (1996).
- “The Azimuthal Decorrelation of Jets Widely Separated in Rapidity,” S. Abachi *et al.*, Phys. Rev. Lett. **77**, 595 (1996).
- “Search for Anomalous WW and WZ Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **77**, 3303 (1996).
- “Measurement of the W Boson Mass,” S. Abachi *et al.*, Phys. Rev. Lett. **77**, 3309 (1996).

- “Search for Additional Neutral Gauge Bosons,” S. Abachi *et al.*, Phys. Lett. **B385**, 471 (1996).
- “The Isolated Photon Cross Section in the Central and Forward Rapidity Region in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **77**, 5011 (1996).
- “Limits on Anomalous  $WW\gamma$  Couplings from  $\bar{p}p \rightarrow W\gamma + X$  Events at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **78**, 3634 (1997).
- “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).
- “Search for Diphoton Events with Large Missing Transverse Energy in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” S. Abachi *et al.*, Phys. Rev. Lett. **78**, 2070 (1997).
- “Search for Top Squark Pair Production in the Dielectron Channel,” S. Abachi *et al.*, Phys. Rev. **D57**, 589 (1998).
- “Study of the  $ZZ\gamma$  and  $Z\gamma\gamma$  Couplings in  $Z(\rightarrow\nu\nu)\gamma$  Production,” S. Abachi *et al.*, Phys. Rev. Lett. **78**, 3640 (1997).
- “Direct Measurement of the Top Quark Mass,” S. Abachi *et al.*, Phys. Rev. Lett. **79**, 1197 (1997).
- “Studies of Gauge Boson Pair Production and Trilinear Couplings,” S. Abachi *et al.*, Phys. Rev. **D56**, 6742 (1997).
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- “Limits of  $WWZ$  and  $WW\gamma$  couplings from  $\bar{p}p \rightarrow W\text{e}\nu\text{j}X$  events at  $\sqrt{s} = 1.8$  TeV,” B. Abbott *et al.*, Phys. Rev. Lett. **79**, 1441 (1997).
- “Search for Scalar Leptoquark Pairs Decaying to Electrons and Jets in  $\bar{p}p$  Collisions,” B. Abbott *et al.*, Phys. Rev. Lett. **79**, 4321 (1997).
- “Color Coherent Radiation in Multijet Events from  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.8$  TeV,” B. Abbott *et al.*, Phys. Lett. **B414**, 419 (1997).
- “Experimental Search for Chargino and Neutralino Production in Supersymmetry Models with a Light Gravitino,” B. Abbott *et al.*, Phys. Rev. Lett. **80**, 442 (1998).
- “Measurement of Dijet Angular Distributions and Search for Quark Compositeness,” B. Abbott *et al.*, Phys. Rev. Lett. **80**, 666 (1998).
- “Search for the Trilepton Signature from Associated Gaugino Pair Production,” B. Abbott *et al.*, Phys. Rev. Lett. **80**, 1591 (1998).

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B. Abbott *et al.*, Phys. Rev. Lett. **80**, 2051 (1998).

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

**Grants & Sponsored Programs:**

NSF	E-515 at FNAL	Graduate Student	Charm Production Measurements	05/79 - 11/86
NSF	D0 at FNAL	Research Associate	Discovery of Top Quark	12/86 - 01/94