

# Alan L. Stone

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## PERSONAL:

US Citizen. Married. One daughter

## EDUCATION:

Ph.D. in Physics, August 1999  
Louisiana State University, Baton Rouge, LA 70803  
Thesis: *Measurement of Inclusive Charm Production in Two-Photon Collisions at LEP*  
Advisor: Prof. Roger R. McNeil

B.A. in Physics and Astronomy, minor in French, May 1993  
Boston University, Boston, MA 02215  
Advisor: Prof. Alan P. Marscher

## EMPLOYMENT HISTORY:

Research Associate	University of Illinois, Chicago	Sep 2003 - Present
Research Associate	Louisiana Tech University	Feb 2000 – Aug 2003
Research Associate	Louisiana State University	Aug 1999 – Jan 2000
Research/Teaching Assistant	Louisiana State University	Jun 1993 – Jul 1999
Tutor	Boston University	Jan 1993 – May 1993
Research Assistant	Boston University	Jun 1992 – May 1993
Assistant Manager	Bruegger's Bagel Bakery	Aug 1988 – May 1993

## COMPUTING EXPERIENCE:

### Platforms and Applications

UNIX/LINUX, Windows 98/NT/2000/XP, Office 2003, ROOT, CRL.

### Languages

Proficient in C++, C, Fortran, HTML and Latex. Familiar with Python, Java and XML.

## **RESEARCH EXPERIENCE:**

### **D0 Experiment (February 2000 – Present)**

#### **Run IIB L1 Calorimeter Upgrade (Oct 2003 – Present)**

Managed the design, prototype, production and testing of the BLS-to-ADF Transition System, a collection of passive electronics, new cables and mechanical support structures necessary to transport the analog trigger signals from the legacy cables of Run I to the new digital electronics of Run IIB.

Implemented a pre-installation plan which includes a sidewalk test stand with racks and computers, mechanical and cable mock-ups, procurement of power, cooling and safety systems, and integration of new electronics into the global readout.

Produced a detailed installation schedule for the decommissioning of the current system and installation of the upgrade system. Documented labelling scheme, interrack wiring, and constraints due to reuse of legacy trigger cables.

#### **Advisory Council Member; Chair (Oct 2003 – Sep 2005; Nov 2004 – May 2005)**

Elected to five person AC by fellow D0 collaborators. Engaged in discussions and provided advice to the D0 Spokespersons on many issues of importance to the D0 Collaboration. Some recommendations on which action was taken: create position of Technical Integration Coordinator, upgrade videoconferencing and meeting rooms, automate effort reporting, reorganize trigger management, increase supervision and support for operations, and review authorship rules.

#### **Graduate Student Supervisor (Sep 2003 – Present)**

Worked with Dr. Marc Buehler on his Ph.D thesis “Measurement of  $Z/\gamma^*(\rightarrow e^+e^-) + \geq n$  Jet Production Cross Sections in  $P\bar{P}$  Collisions at  $S^{1/2} = 1.96$  TeV”, successfully defended in July 2005, and currently supervising James Heinmiller on his thesis topic “Search for Associated Production of  $ZH \rightarrow e^+e^- + b\bar{b}$  Final State”.

Support was also provided with data and Monte Carlo processing, root-tuple skimming, trigger analysis, luminosity determination and data quality and integrity studies

#### **Deputy Run Coordinator (Jul 2002 – Jul 2003)**

Supervised the day to day control room operations of the D0 Experiment, with special attention given to continually increasing data quantity and improving data quality. Coordinated data taking priorities with commissioning activities, upgrades, maintenance and repairs which compete for resources and beam. Required detailed understanding of the D0 Experiment: Sub-detectors, triggers, data acquisition, online controls and monitoring, offline reconstruction, and more. Assisted experts in resolving problems in a timely fashion.

Supported the D0 Run Coordinator as a liaison between D0, the Tevatron accelerator division and the other Tevatron experiments. Presented D0 performance reports at the weekly All Experimenters' meetings on a semi-regular basis.

Wrote much of the web-based documentation to standardize the control room shift operations performed each year by several hundred collaborators with widely varying levels of experience. Control room procedures minimize conflicts and ambiguity. Store and Run checklists enforce a precise order of steps during the critical period of physics data taking. New shifter and troubleshooting guides reduce the burden on experts. Created additional web pages to inform and inspire the D0 Collaboration.

Scheduled shifts for more than 50 individuals each month. Carried 24/7 pager. Ran weekly operations meetings to review all sub-detector, trigger and online systems. Organized series of Shifter Tutorials to bridge the information gap between the experts who have built, commissioned and/or run a system and the less experienced shifters.

Assisted in creating and commissioning a Global Monitor shift to be run by remote collaborators. GM shifters were responsible for the online data quality of physics and trigger objects.

Worked with the Control Room Logbook developers to debug and improve the interface and functionality on the online and web-based logbook.

Served as Controlled Access Coordinator. Enforced safety and radiological worker procedures at D0 as mandated by ES&H. Increased the fraction of properly trained individuals in the D0 Control Room by more than 50%. Trained new people on how to perform a radiation survey in the D0 Collision hall in preparation for a supervised access.

### **Data Acquisition (DAQ) Expert (Jun 2001 – Jun 2003)**

Became expert user of the D0 DAQ and related control room systems. Carried troubleshooter pager. Wrote much of the web-based documentation. Developed many of the instructions and procedures still in use today. Trained, scheduled and supervised 15-20 DAQ shifters per month

### **Offline Reconstruction Software: Missing Transverse Energy (Mar 2000 – May 2002)**

Co-authored the offline missing transverse energy packages: missingET and met\_analyze. Worked in the D0 framework using d0reco (from raw data) and reco\_analyze (reconstructed data). Created separate analyze package to disentangle Jet and MET objects. Added the functionality to measure MET using towers (sum of calorimeter cell layers at a fixed phi and eta) and rings (sum of calorimeter towers at a fixed eta), and provided a correction for muon ionization in the calorimeter.

### **Inter-Cryostat Detector (ICD) Co-Project Leader (Feb 2000 – Aug 2003)**

Installed most of the ICD system: low and high voltage distribution systems; scintillator tiles and fiber cables; preamps, PMTs and motherboards; LED and preamp pulser calibration systems; controls and monitoring.

Commissioning efforts included: recovery and rerouting of irreplaceable Run I signal cables; validating the channel map from new ICD hardware and electronics to legacy signal cables to new calorimeter electronics readout to expected detector physics address; timing in the ICD with respect to the rest of the detector; modifying the geometrical size and representation of the ICD for the D0 GEANT simulation package; obtaining operational readiness clearance. Wrote most of the web-based documentation for experts and control room shifters.

Integrating the ICD into the calorimeter readout proved useful in commissioning the Calorimeter by finding random problems with missing channels, timing delays, high/low gains shifts, incorrect pedestals and triggering issues.

## **L3 Detector (July 1996 – January 2000)**

Developed a method to identify low momentum electrons in order to tag charm production in two-photon collisions, combining calorimetry and tracking measurements to isolate the electron signature from a very large hadronic background. This method was later extended to tag beauty production for the first time in two-photon collisions.

Measured the inclusive charm cross-section in two-photon collisions for the first time at center of mass energies greater than the Z mass. Showed the measurements were consistent with QCD predictions. The data required a significant gluon content in the photon. The direct process ( $\gamma \rightarrow c\bar{c}$ ) was insufficient to describe the data. The cross sections and event distributions required contributions from resolved processes ( $\gamma \text{ gluon} \rightarrow c\bar{c}$ ).

Calibration of the scintillation counter subdetector. Scintillators were used to measure time-of flight of muons, to filter cosmic rays in the trigger system and to provide a back-up trigger for high multiplicity events. Tested and replaced PMTs.

## **REFERENCES:**

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**Links to presentations and web pages:** <http://www-d0.fnal.gov/~alstone>

### **SELECTED WEB PAGES:**

1. Run IIb L1 Cal Trigger Installation  
URL: [www-clued0.fnal.gov/~alstone/D0Work/L1Cal/l1cal.html](http://www-clued0.fnal.gov/~alstone/D0Work/L1Cal/l1cal.html)
2. Run II Luminosity  
URL: [www-d0.fnal.gov/runcoor/RUN/run2\\_lumi.html](http://www-d0.fnal.gov/runcoor/RUN/run2_lumi.html)
3. DAQ Shifters  
URL: [www-d0online.fnal.gov/www/groups/daq/daq\\_main.html](http://www-d0online.fnal.gov/www/groups/daq/daq_main.html)
4. D0 Detector  
URL: [www-d0.fnal.gov/detector](http://www-d0.fnal.gov/detector)
5. D0 Run Plan  
URL: [www-d0.fnal.gov/runcoor/runplans/runplan.html](http://www-d0.fnal.gov/runcoor/runplans/runplan.html)

6. Athena

URL: [www-clued0.fnal.gov/~alstone/D0Work/Athena/athena.html](http://www-clued0.fnal.gov/~alstone/D0Work/Athena/athena.html)

7. D0 Data Taking Status

URL: [d0server1.fnal.gov/Projects/Operations/D0RunIIa\\_DataTaking.htm](http://d0server1.fnal.gov/Projects/Operations/D0RunIIa_DataTaking.htm)

8. D0 Advisory Council

URL: [www-d0.fnal.gov/ac](http://www-d0.fnal.gov/ac)

## **SELECTED PRESENTATIONS:**

1. "Run IIb L1 Cal Trigger Installation", Director's Review, Fermilab, Batavia, IL, 25 October 2005.
2. "TeV4LHC Workshop", H->WW at DZero, Fermilab, Batavia, IL, 21 October 2005.
3. "Run IIb L1 Cal Trigger", D0 Review Poster Session, Fermilab, Batavia, IL, 25 May 2005.
4. "D0 Status: 06/30 -07/05/03", All Experimenters' Mtg., Fermilab, Batavia, IL, 7 July 2003.
5. "Status of D0 Operations", Plenary Session, D0 Collaboration Workshop, Beane, France, 17 June 2003.
6. "Recent Results on Electroweak and Related Physics at D0", Deep Inelastic Scattering Workshop XI, St. Petersburg, Russia, 24 April 2003.
7. "D0 Detector and Data Taking Status", Plenary Session, D0 Collaboration Mtg., Fermilab, Batavia, IL, 12 February 2003.
8. "The Run Report", All DZero Mtg., Fermilab, Batavia, IL, 15 November 2002.
9. "D0 Data Collection Status and Plans", Plenary Session, D0 Collaboration Mtg., Fermilab, Batavia, IL, 9 October 2002.
10. "Status of D0 Operations", Plenary Session, D0 Collaboration Workshop, Norman, OK, 7 July 2002.
11. "Electroweak Physics Prospects in Run II with the D0 Detector at the Tevatron Collider", DPF 2002 Meeting, Williamsburg, VA, 24 May 2002.
12. "The Inter-Cryostat Detector Project", All DZero Mtg., Fermilab, Batavia, IL, 7 September 2001.
13. "Separation of Direct and Resolved Processes in Inclusive Charm Production in Two-Photon Collisions", Louisiana Tech Seminar, Ruston, LA, December 1999.
14. "Heavy Flavor Production in Two-Photon Collisions Measured by the L3 Experiment", Cornell Seminar, Ithaca, NY, October 1999.

15. "Measurement of Inclusive Charm Production in Two-Photon Collisions at LEP", APS Centennial Mtg., Atlanta, GA, March 1999.
16. "Preliminary Cross Section Measurement of  $e^+ e^- \rightarrow e^+ e^- c\bar{c} + X$  at LEP with the L3 Detector", Joint APS/AAPT Mtg., Columbus, OH, April 1998.
17. "Inclusive Charm Production in Two-Photon Collisions at LEP with the L3 Detector", QCD Moriond Conference, Les Arcs, France, March 1998.
18. "Electron Identification to Tag Charm Production in Two-Photon Processes", L3 General Mtg., Toledo, Spain, May 1997.

## **PUBLICATIONS:**

1. **SEARCH FOR LARGE SPATIAL DIMENSIONS IN DIMUON PRODUCTION AT D0.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jul 2005. 142pp.  
Submitted to **Nucl.Instr.Meth.**
2. **SEARCH FOR LARGE SPATIAL DIMENSIONS IN DIMUON PRODUCTION AT D0.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jun 2005. 7pp.  
Published in **Phys.Rev.Lett.95:161602,2005.**
3. **MEASUREMENT OF THE T ANTI-T PRODUCTION CROSS SECTION IN P ANTI-P COLLISIONS AT  $S^{1/2} = 1.96$ -TEV IN DILEPTON FINAL STATES.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2005. 7pp.  
Published in **Phys.Lett.B626:55-64,2005.**
4. **SEARCH FOR SINGLE TOP QUARK PRODUCTION IN P ANTI-P COLLISIONS AT  $S^{1/2} = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2005. 9pp.  
Published in **Phys.Lett.B622:265-276,2005.**
5. **SEARCH FOR RIGHT-HANDED W BOSONS IN TOP QUARK DECAY.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2005. 7pp.  
Published in **Phys.Rev.D72:011104,2005.**
6. **SEARCH FOR RANDALL-SUNDRUM GRAVITONS IN DILEPTON AND DIPHOTON FINAL STATES.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2005. 7pp.  
Published in **Phys.Rev.Lett.95:091801,2005.**
7. **MEASUREMENT OF THE T ANTI-T PRODUCTION CROSS SECTION IN P ANTI-P COLLISIONS AT  $S^{1/2} = 1.96$ -TEV USING LEPTON + JETS EVENTS WITH LIFETIME B-TAGGING.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2005. 7pp.  
Published in **Phys.Lett.B626:35-44,2005.**

8. **SEARCH FOR SUPERSYMMETRY VIA ASSOCIATED PRODUCTION OF CHARGINOS AND NEUTRALINOS IN FINAL STATES WITH THREE LEPTONS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2005. 7pp.  
Published in **Phys.Rev.Lett.95:151805,2005.**
9. **PRODUCTION OF WZ EVENTS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV AND LIMITS ON ANOMALOUS WWZ COUPLINGS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2005. 7pp.  
Published in **Phys.Rev.Lett.95:141802,2005.**
10. **SEARCH FOR NEUTRAL SUPERSYMMETRIC HIGGS BOSONS IN MULTIJET EVENTS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2005. 7pp.  
Published in **Phys.Rev.Lett.95:151801,2005.**
11. **MEASUREMENT OF THE P – ANTI-P --> W GAMMA + X CROSS SECTION AT  $S^{**}(1/2) = 1.96$ -TEV AND WW GAMMA ANOMALOUS COUPLING LIMITS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Mar 2005. 7pp.  
Published in **Phys.Rev.D71:091108,2005.**
12. **STUDY OF Z GAMMA EVENTS AND LIMITS ON ANOMALOUS ZZ GAMMA AND Z GAMMA GAMMA COUPLINGS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Feb 2005. 7pp.  
Published in **Phys.Rev.Lett.95:051802,2005.**
13. **MEASUREMENT OF INCLUSIVE DIFFERENTIAL CROSS SECTIONS FOR UPSILON(1S) PRODUCTION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Feb 2005. 7pp.  
Published in **Phys.Rev.Lett.94:232001,2005.**
14. **SEARCH FOR FIRST-GENERATION SCALAR LEPTOQUARKS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Dec 2004. 7pp.  
Published in **Phys.Rev.D71:071104,2005.**
15. **FIRST MEASUREMENT OF SIGMA (P ANTI-P --> Z) . BR (Z --> TAU TAU) AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Dec 2004. 7pp.  
Published in **Phys.Rev.D71:072004,2005.**
16. **A SEARCH FOR ANOMALOUS HEAVY-FLAVOR QUARK PRODUCTION IN ASSOCIATION WITH W BOSONS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Nov 2004. 7pp.  
Published in **Phys.Rev.Lett.94:152002,2005.**
17. **MEASUREMENT OF THE TOP QUARK MASS IN ALL-JET EVENTS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 14pp.  
Published in **Phys.Lett.B606:25-33,2005.**

18. **A MEASUREMENT OF THE RATIO OF INCLUSIVE CROSS SECTIONS  $\sigma(\text{P ANTI-P} \rightarrow \text{Z} + \text{B-JET}) / \sigma(\text{P ANTI-P} \rightarrow \text{Z} + \text{JET})$  AT  $\sqrt{s} = 1.96\text{-TeV}$ .**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:161801,2005.**
19. **MEASUREMENT OF THE WW PRODUCTION CROSS SECTION IN P ANTI-P COLLISIONS AT  $\sqrt{s} = 1.96\text{-TeV}$ .**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:151801,2005.**
20. **A SEARCH FOR W B ANTI-B AND W H PRODUCTION IN P ANTI-P COLLISIONS AT  $\sqrt{s} = 1.96\text{-TeV}$ .**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:091802,2005.**
21. **MEASUREMENT OF THE  $\Lambda^0(\text{B})$  LIFETIME IN THE DECAY  $\Lambda^0(\text{B}) \rightarrow \text{J} / \text{PSI } \Lambda^0$  WITH THE D0 DETECTOR.**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:102001,2005.**
22. **MEASUREMENT OF THE RATIO OF  $\text{B}^+$  AND  $\text{B}^0$  MESON LIFETIMES.**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:182001,2005.**
23. **A SEARCH FOR THE FLAVOR-CHANGING NEUTRAL CURRENT DECAY  $\text{B}^0(\text{S}) \rightarrow \mu^+ \mu^-$  IN P ANTI-P COLLISIONS AT  $\sqrt{s} = 1.96\text{-TeV}$  WITH THE D0 DETECTOR.**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2004. 7pp.  
Published in **Phys.Rev.Lett.94:071802,2005.**
24. **MEASUREMENT OF THE  $\text{B}^0(\text{S})$  LIFETIME IN THE EXCLUSIVE DECAY CHANNEL  $\text{B}^0(\text{S}) \rightarrow \text{J} / \text{PSI } \phi$ .**  
By D0 Collaboration (V.M. Abazov *et al.*). Sep 2004. 7pp.  
Published in **Phys.Rev.Lett.94:042001,2005.**
25. **MEASUREMENT OF DIJET AZIMUTHAL DECORRELATIONS AT CENTRAL RAPIDITIES IN P ANTI-P COLLISIONS AT  $\sqrt{s} = 1.96\text{-TeV}$ .**  
By D0 Collaboration (V.M. Abazov *et al.*). Sep 2004. 6pp.  
Published in **Phys.Rev.Lett.94:221801,2005.**
26. **SEARCH FOR SUPERSYMMETRY WITH GAUGE-MEDIATED BREAKING IN DIPHOTON EVENTS AT D0.**  
By D0 Collaboration (V.M. Abazov *et al.*). Aug 2004. 7pp.  
Published in **Phys.Rev.Lett.94:041801,2005.**
27. **A PRECISION MEASUREMENT OF THE MASS OF THE TOP QUARK.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jun 2004, 5pp.  
Published in **Nature 429:638-642,2004.**

28. **OBSERVATION AND PROPERTIES OF THE X(3872) DECAYING TO J / PSI PI+ PI- IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2004. 6pp.  
Published in **Phys.Rev.Lett.93:162002,2004.**
29. **HELICITY OF THE W BOSON IN LEPTON + JETS T ANTI-T EVENTS.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2004. 15pp.  
Published in **Phys.Lett.B617:1-10,2005.**
30. **SEARCH FOR DOUBLY CHARGED HIGGS BOSON PAIR PRODUCTION IN THE DECAY TO MU+ MU+ MU- MU- IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.96$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2004. 17pp.  
Published in **Phys.Rev.Lett.93:141801,2004.**
31. **SEARCH FOR PAIR PRODUCTION OF LIGHT SCALAR TOP QUARK IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Feb 2004. 12pp.  
Published in **Phys.Rev.Lett.93:011801,2004.**
32. **COMBINATION OF CDF AND D0 RESULTS ON W BOSON MASS AND WIDTH.**  
By CDF Collaboration and D0 Collaboration (V.M. Abazov *et al.*). Nov 2003. 26pp.  
Published in **Phys.Rev.D70:092008,2004.**
33. **SEARCH FOR 3- AND 4-BODY DECAYS OF THE SCALAR TOP QUARK IN PROTON ANTI-PROTON COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Oct 2003. 14pp.  
Published in **Phys.Lett.B581:147-155,2004.**
34. **SEARCH FOR NEW PARTICLES IN THE TWO JET DECAY CHANNEL WITH THE D0 DETECTOR.**  
By D0 Collaboration (V.M. Abazov *et al.*). Aug 2003. 13pp.  
Published in **Phys.Rev.D69:111101,2004.**
35. **OBSERVATION OF DIFFRACTIVELY PRODUCED W AND Z BOSONS IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 1800$ -GEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Aug 2003. 14pp.  
Published in **Phys.Lett.B574:169-179,2003.**
36. **SEARCH FOR NARROW T ANTI-T RESONANCES IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jul 2003. 7pp.  
Published in **Phys.Rev.Lett.92:221801,2004.**
37. **SEARCH FOR LARGE EXTRA DIMENSIONS IN THE MONOJET + MISSING E(T) CHANNEL AT D0.**  
By D0 Collaboration (V.M. Abazov *et al.*). Feb 2003. 6pp.  
Published in **Phys.Rev.Lett.90:251802,2003.**

38. **SEARCH FOR THE PRODUCTION OF SINGLE SLEPTONS THROUGH R-PARITY VIOLATION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jul 2002. 7pp.  
Published in **Phys.Rev.Lett.89:261801,2002.**
39. **MULTIPLE JET PRODUCTION AT LOW TRANSVERSE ENERGIES IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Jul 2002. 16pp.  
Published in **Phys.Rev.D67:052001,2003.**
40. **T ANTI-T PRODUCTION CROSS-SECTION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2002. 62pp.  
Published in **Phys.Rev.D67:012004,2003.**
41. **SEARCH FOR MSUGRA IN SINGLE ELECTRON EVENTS WITH JETS AND LARGE MISSING TRANSVERSE ENERGY IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). May 2002. 24pp.  
Published in **Phys.Rev.D66:112001,2002.**
42. **IMPROVED W BOSON MASS MEASUREMENT WITH THE D0 DETECTOR.**  
By D0 Collaboration (V.M. Abazov *et al.*). Apr 2002. 20pp.  
Published in **Phys.Rev.D66:012001,2002.**
43. **A DIRECT MEASUREMENT OF W BOSON DECAY WIDTH.**  
By D0 Collaboration (V.M. Abazov *et al.*). Mar 2002. 12pp.  
Published in **Phys.Rev.D66:032008,2002.**
44. **SEARCH FOR R-PARITY VIOLATING SUPERSYMMETRY IN DIMUON AND FOUR JETS CHANNEL.**  
By D0 Collaboration (V.M. Abazov *et al.*). Nov 2001. 10pp.  
Published in **Phys.Rev.Lett.89:171801,2002**
45. **SEARCH FOR LEPTOQUARK PAIRS DECAYING TO NEUTRINO NEUTRINO + JETS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2)=1.8$ -TEV.**  
By D0 Collaboration (V.M. Abazov *et al.*). Nov 2001. 12pp.  
Published in **Phys.Rev.Lett.88:191801,2002**
46. **THE INCLUSIVE JET CROSS-SECTION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV USING THE K-PERPENDICULAR ALGORITHM.**  
By D0 Collaboration (V.M. Abazov *et al.*). Sep 2001. 7pp.  
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