

ROBERT CRAIG GROUP

Curriculum Vitae

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Fermilab (CDF experiment)
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RESEARCH EXPERIENCE

Research Associate: CDF Experiment, Fermilab 12/2006 – present

Contributed to the first observation of electroweak top quark production and the search for the Higgs boson produced in association with a W boson. Worked to expand the muon acceptance in these analyses and improve the purity of the muon triggers. Coordinated the simulation of event samples for the Higgs discovery group and served as convener for the Single Top and WH analysis groups. Directed undergraduate students on cosmic ray shield studies for the mu2e experiment, a search for double di-jet resonances, and a search for the Higgs bosons decaying into two photons.

EDUCATION

Ph.D. in Physics, Dec. 2006. (GPA=4.0) Gainesville, FL
University of Florida

Advisor: Richard D. Field and Konstantin Matchev

Thesis: *Inclusive Jet Production using the Midpoint Algorithm in Run II at CDF*

M.S. in Physics, Aug. 2001. (GPA=3.8) Tallahassee, FL
Florida State University

Advisor: Harrison B. Prosper

B.A. in Physics, May 1999. Due West, SC
Erskine College

RESEARCH AND EXPERIMENTAL HIGHLIGHTS

CDF Experiment

Convener of the $WH \rightarrow \ell\nu b\bar{b}$ analysis group: Sept. 2009 - present

Over the last two years we have improved the sensitivity of the $WH \rightarrow \ell\nu b\bar{b}$ by more than 50% beyond what is expected from adding additional luminosity. Recently, I have taken on the convenership of this group at CDF. I plan to lead the effort to add additional analysis improvements in order to give the Tevatron the best possible chance of finding evidence of the Higgs boson with its full dataset.

Convener of the single top group: May 2008 - Sept. 2009

Managed and coordinated the efforts of the single top analysis group of the CDF experiment. In my convenership we observed single top quark production for the first time, and made the most precise measurement to date of the single top production cross section and the CKM matrix element V_{tb} .

Observation of electroweak single top production:

Directed a graduate student on the development of an analysis method employing boosted decision trees to search for single top production. Developed a method to take muon events which did not trigger the CDF data acquisition system by using an alternative trigger based on missing transverse energy and jets. This method to acquire additional signal acceptance improved sensitivity to single top by about 15 % and has been adopted by other groups at CDF. Combined the three single top results using a technique based on best linear unbiased estimators which resulted in an additional 9 % improvement to sensitivity. These efforts contributed to the first observation of electroweak single top production by the CDF experiment.

Search for standard model Higgs boson:

Applied the matrix element and boosted decision tree techniques, which were developed for the single top analysis, to a search for the Higgs boson produced in association with a W boson. Worked to combine this result with a sister analysis based on neural networks. Published the combined result in PRL as the most sensitive Tevatron low-mass Higgs boson search to date.

Muon trigger improvements:

Designed, implemented, and tested new triggers for muons located in gap regions of the CDF muon systems. One new trigger uses coincidence with a set of scintillators which was installed, but not previously used by CDF. Studied and calibrated the trigger timing gates and counter efficiencies of this detector system. Derived a map between the scintillators and more standard muon detectors and implemented this mapping into a new trigger algorithm. These improved triggers increase signal acceptance for the Higgs boson and single top search channels by about 15 %.

Higgs group Monte Carlo coordinator: 2007 - 2008

Generated simulated Higgs boson signal events and advised analysis groups on their use for all Higgs boson searches at the CDF experiment. Designed, instituted, and maintained an automated web tool which made new samples available to the experiment.

QCD studies 2005 - 2009

- Measured the inclusive jet cross section in the forward region of the CDF detector for the first time with a cone algorithm.
- Measured the properties of the underlying event in CDF collisions.

Jet corrections: 2005

Used the technique of dijet P_T -balancing to test and maintain the jet energy relative corrections used to equalize the CDF calorimeter response in pseudo-rapidity.

Data sample and disk space manager: 2005 - 2008

Managed the data samples of the QCD physics group at the CDF experiment.

Mu2e Experiment: 2009 - present

Led high school and undergraduate students on assembly and commissioning of prototype cosmic ray veto detector for the mu2e experiment.

DØ Experiment

Monitoring and control tools: 2000 - 2001

Developed graphical user interface tools in the PYTHON programming language to monitor and control DØ detector components. Specifically, involved in the calorimeter and the silicon track trigger monitoring tools.

Other Efforts

Computing accomplishments: 2002 - 2006

- Helped integrate the University of Florida grid computing site into the CDF NamCAF grid-based analysis farm.
- Installed and maintained the software of the CDF experiment on a computing cluster at the University of Florida. Maintained Monte Carlo generator tools which were used for validation and tuning of the Monte Carlo in preparation for its use by the CDF and CMS experiments.
- Developed and investigated tools for accessing parton density functions. Specifically an interface to the Les Houche Accord was developed so that it could be used trivially with the common Monte Carlo programs PYTHIA and HERWIG.
- Helped integrate and maintain the Les Houche Accord parton density function interface code into the software environment of the CDF experiment.

Phenomenology of supersymmetry: 2003 - 2004

- Developed a technique for use by LHC experiments to extract the mass of the supersymmetric particles using the shapes of various kinematic distributions.
- Led a student on the development a web-based tool which calculates supersymmetric mass spectra and cross sections SUPERSIM.

STUDENT MENTOR EXPERIENCE

I am currently contributing to the supervision of three students on their thesis. I have a history of success at receiving support for and directing undergraduate and high school students on research projects in experimental particle physics.

Graduate Students

Barbara Alvarez, Universidad de Oviedo, Spain; Ph.D. expected 2010
Search for Higgs produced in association with a W boson. Barbara is focusing her efforts on improving the jet energy resolution information which is used in the matrix element analysis.

Bruno Casal, Universidad de Cantabria, Spain; Ph.D. expected 2009
Search for Single Top Quark production. Bruno is focusing his efforts on improving muon signal acceptance, polarization studies, and optimizing search techniques using boosted decision trees.

Karen Bland, Baylor University, Ph.D. expected 2011
Search for Higgs bosons decaying into diphotons. Karen is focusing on optimizing a standard model search by improving photon ID efficiency and background rejection.

Undergraduate and High School Students

High School Students on Mu2e (2009): Led local high school students on R&D for the cosmic ray test stand of the Mu2e experiment.

IMSA Student at CDF (2007 - 2009): Supervised an Illinois Math and Science Academy high school student on an analysis of CDF data which searched for the Higgs boson decaying to two photons. The student has been extremely successful and we have published a paper based on his efforts.

Italian Summer Student at CDF (2008): Wrote a proposal for and then supervised a participant of the INFN-DOE Summer Students program from Pisa, Italy on an analysis of CDF data which searched for double dijet mass resonances.

SULI Summer Student at CDF (2008): Wrote a proposal for and then supervised a participant of the DOE's Science Undergraduate Laboratory Internships program on an analysis of CDF data which searched for double dijet mass resonances.

Pre-Service Teaching Internship at CDF (2007): Wrote a proposal for and supervised a participant of the DOE's Pre-Service Teaching internship student on an analysis of CDF data which searched for the Higgs boson decaying to two photons. The student was successful at setting the strongest limit to date on fermiophobic Higgs models from a hadron collider.

REU Summer Student at the University of Florida (2003): Supervised a student from the NSF Research Experiences for Undergraduates, REU, program at the University of Florida. The student developed a web-based tool which calculates supersymmetric mass spectra and cross sections.

HONORS AND AWARDS

Outstanding Mentor Award DOE Office of Science, for mentoring students on the CDF experiment	2009
Alumni Fellowship Department of Physics, University of Florida	08/2002 – 08/2006
DPF Travel Award Awarded to attend the April APS meeting in Dallas, TX	Spring 2006
UF College of Liberal Arts and Science Travel Award Awarded to attend the Pheno 2006 meeting in Madison, WI	Spring 2006
DPF Travel Award Awarded to attend the April APS meeting in Tampa, FL	Spring 2005
REU Summer Research Fellowship Awarded for summer research at Florida State University	Summer 1999
Marsh W. White Award (Sigma Pi Sigma) For design of a functional Foucault pendulum to be displayed publicly at Erskine College	1999

CONFERENCE TALKS AND SEMINARS

“Status of Low-Mass Higgs Searches at the Tevatron”
SLAC Experimental Seminar, Menlo Park, CA, November 2009

“Lighting up the Higgs sector with photons at CDF”
– Notre Dame HEP Seminar, Notre Dame, IN, November 2009
– University of Wisconsin HEP Seminar, Madison, WI, April 2009

“Low Mass Higgs Boson Search Improvements at CDF”
Tevatron Higgs Workshop, Fermilab, May 2009

“The Observation of Single Top Production at the Tevatron”
April 2009
– University of Victoria HEP Seminar, Victoria, Canada
– TRIUMF National Lab Seminar, Vancouver, Canada

“The Race for the Higgs Boson”
FIU Physics Colloquium, Miami, FL, April 2009

“Searching for the Higgs One Single Top at a Time”
January-February 2009
– FSU HEP Seminar, Tallahassee, FL
– MSU HEP Seminar, East Lansing, MI
– Michigan HEP Seminar, Ann Arbor, MI

“Higgs Searches at CDF”

Lake Louise Winter Institute, Alberta, Canada, February 2009

“Single Top at CDF : Status and Plans”

CDF Collaboration Meeting, FNAL, IL, June 2008

“Status of Higgs Searches at CDF”

February - March 2008

- Instituto de Fisica de Cantabria HEP Seminar, Santander, Spain
- University of Florida HEP Seminar, Gainesville, FL

“Recent QCD Results from the Tevatron”

January - February 2008

- XXII Rencontres de Physique de la Vallee d’Aoste, La Thuile, Italy
- Argonne HEP Seminar, Argonne National Lab

“Using MET Triggers for Greater Muon Acceptance”

CDF Collaboration meeting, FNAL, IL, October 2007

“The Inclusive Jet Cross Section at CDF”

February-September 2006

- FSU HEP Seminar, Tallahassee, FL
- Seminar at the Enrico Fermi Institute, Chicago, IL
- Vanderbilt Nuclear and Particle Physics Seminar, Nashville, TN
- Pheno Symposium, Madison, WI
- University of Florida HEP Seminar, Gainesville, FL
- APS April Meeting, Dallas, TX
- CDF Collaboration meeting, FNAL, IL
- UF-FSU Phenomenology Symposium, Tallahassee, FL, December 2004

“Validation of Jet Energy Scale”

CDF Collaboration meeting, FNAL, IL, November 2005

“PDF use from the Tevatron to the LHC”

- TeV4LHC Workshop, FNAL, IL, November 2005
- South Eastern CMS Physics Workshop, Gainesville, FL, May 2006

“SUSY Mass Measurements at the LHC”

- Pheno Symposium, Madison, WI, May 2005
- UF HEP Seminar, Gainesville, FL, April 2005
- APS South Eastern Section Meeting, Gainesville, FL, November 2005
- TeV4LHC Workshop, FNAL, IL, November 2005

POSTER SESSIONS

“Combination of Single-top Quark Production Results from CDF”

ICHEP, Philadelphia PA, July 2008

“SUSY: Beyond Discovery”

APS April Meeting, Tampa, FL, April 2005

WORKSHOPS AND SUMMER SCHOOLS

The Hadron Collider Physics Summer School (HCPSS)

Fermilab, August 9 - 18, 2006

Theme: *“Physics Potential of the First Years of the LHC”*

Theoretical Advanced Study Institute (TASI) Summer School

Boulder, CO, University of Colorado, June 4 - July 1, 2006

Theme: *“Exploring New Frontiers Using Colliders and Neutrinos”*

TeV4LHC workshop

Fermilab, 2005

Contributed to the QCD and Landscape working groups

MEMBERSHIP AND LEADERSHIP

National Scholars Honor Society (inducted 2007)

Phi Kappa Phi Honor Society (inducted 2006)

Philomathean Literary Society, President (1999), Vice President (1998)

Kappa Mu Epsilon, Mathematics Honor Society, President (1999, Erskine College chapter)

Sigma Pi Sigma, Physics honor society

FNAL Golf League: Arrowhead League Champions 2008 and 2009

TECHNICAL EXPERIENCE

Technical Assistant

Summer 2002

Department of Physics, University of Florida

GriPhyN/iVDGL: Technical assistant for computing cluster management

Computer Technician

08/2001 – 05/2002

Byte Shop Computer, Naples, FL

Service department manager and technician

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EXPERIENCE IN OUTREACH

STATEMENT OF INTEREST

Far too often the importance of public outreach is overlooked. I plan to make significant contributions to my research field over the course of my career; however, I hope that these will pale in comparison to the accomplishments of the students I influence and the people I introduce to our field through outreach efforts. As a researcher, I know that my direct contributions are limited by my lifespan, but if I can pass along my interest in the topic and my will to help a student discover the excitement of science, then I know my contributions to physics and to society will be far greater. In my experience, the most important thing a scientist can do as a role model is to donate some of their time to another interested mind. Often, this effort results in a greater understanding for both parties! In my short career, I have taken advantage of many opportunities to stimulate interest in our field through public outreach. Although it is not possible to quantify the long term impact that these efforts have, I am confident that they will be significant. I believe the triumphs of HEP are some of the most impressive in physics, and I always enjoy the experience of trying to share my excitement with others.

Working in particle physics provides a unique opportunity for successful outreach effort. The scale of the experiments that we do capture the attention of the public and as a result they seek us out to learn more. This means that even with minimal effort HEP scientists can make a difference to local students and surrounding neighborhoods through outreach.

OUTREACH EXPERIENCE

Tours of the CDF Experiment:

- REU summer students, Aug. 5, 2009
- Fermilab Open House, Jan. 17, 2009
- Linear Collider Accelerator School students October 24, 2008
- Hadron Collider Summer School students Aug 16, 2008
- Tour of CDF for local high school students May 21, 2008
- Private tour of Fermilab for small group of college students, March 19 2007
- Tour for Congressman Kirk and group of 7th graders, Feb. 17, 2007
- Fermilab Open House, Feb. 11, 2007

Editor for “Result of the Week” in Fermi Today (Nov, 2008 - current) : Over the last year I have served as the editor for bi-weekly articles featuring exciting new results from the CDF experiment published in the on-line newsletter “Fermi Today”. I select the topic to be featured and then work closely with the analysis authors and the editors of Fermi Today to insure that the article is entertaining and can be understood by the non-scientist community at Fermilab.

2008 Quadrennial Congress of Sigma Pi Sigma (Nov. 7, 2008) :

- Volunteered for “breakfast with a scientist”
- Gave tour of the CDF experiment

Saturday Morning Physics: Tours of the DØ experiment facilities for local high school students, Jan. 24, 2009

Q&A session with students: Ricardo Eusebi and I answered questions from high school students from the Morgan Park Academy of Chicago, May 23, 2007

Ask a Scientist: Available to answer questions from the public at Wilson Hall, Nov. 2, 2008

Poster Session Judge: Judge of student posters for the 2008 Fermilab User’s meeting on June 4th, 2008.

Saturday Morning Physics: Tours of the SiDet facility for local high school students, Nov. 12, 2007

FNAL prairie harvest: Participant in the harvesting of prairie seeds for the prairie restoration project at Fermilab, Nov. 3rd, 2007

Workshop for Illinois Math and Science Academy: Tour of FNAL Linac, 15th floor, and LHC@FNAL for 80 math teachers, June 16, 2007

Q&A session with students: Ricardo Eusebi and I answered questions from 38 high school students from the Morgan Park Academy of Chicago, May 23, 2007

Ask a Scientist: Available to answer questions from the public at Wilson Hall, May 6, 2007

Saturday Morning Physics: Tours of the DØ experiment facilities for local high school students, April 14, 2007

Science Fair Judge: Judged science projects of local middle school students, Naqua Valley High School, January 27, 2007

Saturday Morning Physics: Tours of the FNAL linear accelerator facilities for local high school students, January 13, 2007

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RESEARCH STATEMENT

What are the most fundamental pieces of our Universe? What are their properties and how do they interact with each other to form the structure and the phenomena we observe? These are the questions that keep me up at night and excited about my career.

Answering these questions is the goal of high energy experimental particle physics. In this field, large accelerators are used to force particles to collide at extremely high energies. Higher energy particles have a smaller wavelength and can therefore be used to probe smaller distance scales in order to resolve small scale structure. Also, higher energy collisions make it possible to produce and study the properties of heavier particles in the lab. In addition to high energies, high intensity beams can be used to discover and study ultra rare processes.

Major progress has been made in this field in the last 50 years toward composing a “standard model” (SM) of particle physics. Although this model is capable of describing nearly all observed phenomena, there are many questions left to answer. For example, in the SM the particles are allowed to carry mass due to the Higgs mechanism. In this model, masses are generated through the mechanism of spontaneous symmetry breaking of the electroweak force by the Higgs field. In addition to the field, the theory requires a massive particle called the Higgs boson, which has yet to be discovered. The Tevatron experiments at Fermilab have searched for and achieved unprecedented sensitivity to the Higgs boson. Over the last few years, I have made important contributions to the search for a low mass Higgs boson in the $l\nu b\bar{b}$ channel. The full Tevatron dataset could be greater than $10fb^{-1}$, more than twice what has been collected so far. With this dataset, and improvements to analysis technique, the Tevatron has a significant chance of finding evidence for a low mass Higgs boson. I currently serve as the convener of the $Wh \rightarrow l\nu b\bar{b}$ analysis group and I plan to lead the effort to add analysis improvements in order to increase the probability that we will see the first signs of the Higgs boson at the Tevatron. This is my primary short-term research plan.

Even if the Higgs boson is discovered, questions still remain. Theoretical issues prevent the SM from being useful beyond the energy scale of a few TeV without some extension. There is also more direct evidence that the SM of particle physics is not complete. Astronomers observe an unknown source of matter through observations of galaxies and clusters of galaxies that cannot be explained by any known physics phenomena. It is possible that the particles making up this matter could be produced via the collisions of high energy particles. It is also possible that the effects of the interactions of these particles could cause deviations from the rates expected for SM processes, therefore yielding indirect evidence of their existence.

The large hadron collider (LHC) at CERN is poised to begin taking data sometime in the next year. With its unprecedented center of mass energy, exciting physics discoveries such as the Higgs boson or supersymmetric particles - which might solve the mystery of dark matter - are almost certainly on the way.

However, it is possible, that new physics may exist just outside the energy reach of planned collider experiments. In this case, it may be possible to infer their existence by observing processes that occur at a higher rate than that predicted by the SM. I have recently become

involved with R&D efforts for the mu2e experiment, an approved experiment that will search for the conversion of a muon into an electron in the presence of a nucleus. This process is extremely rare in the SM, but many extensions to the SM include charged lepton flavor violating interactions that would force this process to occur at a much higher rate. For example, many supersymmetric theories could provide a candidate for the mysterious dark matter, but also include lepton flavor violating interactions that could lead to a signal in the mu2e experiment. An observation of this reaction would be an absolute sign of physics beyond the SM! The mu2e experiment will be sensitive to models with energy scales far beyond that which can be produced at colliders like the Tevatron and the LHC.

Extremely interesting questions also remain in neutrino physics. Fermilab has plans for an intense proton source, called Project X, which will provide beam for multiple experiments designed to answer many of the open questions. Long baseline neutrino oscillation experiments will take advantage of an intense beam of neutrinos to take neutrino physics to a new level of precision. The NO ν A experiment, for example, will search for evidence of muon to electron neutrino oscillations. This experiment could provide a measurement of the last unknown mixing angle, θ_{13} , observe matter/anti-matter asymmetries in neutrinos, and resolve the neutrino mass hierarchy.

In order to insure the long term success of particle physics in the United States, there must be a vibrant domestic research program. Although the Tevatron program will end in the next few years, I plan to continue to support US efforts in particle physics through experiments such as mu2e and other projects related to Project X. I hope to use the contacts I have developed at Fermilab during my employment there to facilitate involvement in these experiments. My medium to long term research plan includes contributing to R&D efforts for mu2e and as my CDF work winds down I will consider joining the ATLAS group at SLAC or another Project X experiment at Fermilab such as NO ν A.

Due to the abundant possibility for discovery, these are truly exciting times to be a particle physicist! As a young physicist, I have had the pleasure of making contributions to several important measurements at the Tevatron. Now, I look forward to the future and the possibility of a major discovery! Once a signal that cannot be described by the SM is observed at the Tevatron, the LHC, or an experiment at the intensity frontier, theorists and experimentalists will share the difficult and exciting task of deciphering the implications of this discovery on the foundations of physics.

I look forward to this challenge!

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PUBLICATION LIST

Here, I list publications and conference proceedings in which I have made major contributions in the form of analysis technique, student mentorship, or analysis review.

Publications and Conference Proceedings

- [1] “*Search for Standard Model Higgs Bosons in $WH \rightarrow \ell\nu b\bar{b}$* ”,
Phys. Rev. Lett 103, 101802 (2009)
- [2] “*Observation of Single Top Quark Production*”,
Phys. Rev. Lett 103, 092002 (2009)
- [3] “*Combination of CDF and $D\bar{O}$ Single Top Quark Cross Sections Measurements*”,
Tevatron Electroweak Working Group, arXiv:0908.2171
- [4] “*Search for a Fermiophobic Higgs Boson Decaying into Diphotons at CDF*”,
Phys. Rev. Lett 103, 061803 (2009)
- [5] “*Measurement of Single Top Quark Production at CDF*”,
Phys. Rev. Lett. 101, 250601 (2008)
- [6] “*Higgs Boson Searches at CDF*”,
Contributed to Lake Louise Winter Institute 2009, arXiv:0905.4267
- [7] “*Combination of Single Top Quark Production Results from CDF*”,
Contributed to ICHEP 2008, arXiv:0809.4670
- [8] “*The Inclusive Jet Cross Section Using the Midpoint Algorithm in RunII at CDF*”,
Phys. Rev. D78, 052006 (2008)
- [9] “*Search for a Higgs Boson Decaying to Two W Bosons at CDF*”,
Phys. Rev. Lett. 102, 021802 (2009)
- [10] “*Measurement of Single Top Quark Production at CDF*”,
in preparation for PRD
- [11] “*Underlying Event Studies in RunII at CDF*”,
in preparation for PRD
- [12] “*Recent QCD Studies at the Tevatron*”,
Contributed to XXII Rencontres de Physique de la Vallee d’Aoste, arXiv:0804.4494
- [13] “*PDF use from the Tevatron to the LHC*”,
Contributed to 2005 TeV4LHC workshop, QCD Group Report, hep-ph/0605240
- [14] “*Slepton Mass Measurements at the LHC II*”,
Contributed to 2005 TeV4LHC workshop, Exotics Group Report, hep-ph/0608322
- [15] “*Slepton Mass Measurements at the LHC*”,
Contributed to 2005 Linear Collider Workshop, hep-ph/0507002

- [16] “*PYTHIA Tune A, HERWIG, and JIMMY in Run 2 at CDF*”,
Contributed to Hera and the LHC workshop, hep-ph/0510198
- [17] “*The Les Houches Accord PDFs (LHAPDF) and LHAGLUE*”,
Contributed to Hera and the LHC workshop, hep-ph/0508110

In addition to the publications listed above, I have been a member of the CDF author list since January 2006 with over 150 publications and more than 3000 citations. I have also made major contributions to more than 40 internal notes of the CDF collaboration.

CDF Internal Notes

- [18] “*Measurement of the WW and WZ production cross section in $lvjj$* ”,
May. 2009, CDF Note 9798
- [19] “*Combined Search for Higgs Produced in Association with a W Boson*”,
Oct. 2008, CDF Note 9586
- [20] “*Search for a Fermiophobic Higgs Boson with the Diphoton Final State at CDF*”,
Oct. 2008, CDF Note 9489, CDF Public Note 9586
- [21] “*Search for SM Higgs Boson Production in Association with a W Using ME+BDT*”,
CDF Note 9255, CDF Note 9404, CDF Public Note 9463.
- [22] “*Combination of the Single-Top Searches with 2.7 fb^{-1}* ”,
CDF Note 9173, CDF Public Note 9251, CDF Note 9459.
- [23] “*Search for Single Top Quark Production using Boosted Decision Trees*”,
CDF Note 9263, CDF Public Note 9313, CDF Note 9428, CDF Public Note 9445.
- [24] “*Photon Efficiency Scale Factors*”,
July. 2008, CDF Note 9429
- [25] “*Muon Trigger Studies: Focusing on the Gaps*”,
CDF Note 9106.
- [26] “*Increasing Muon Acceptance with the MET Plus Jet Triggers*”,
CDF Note 9105.
- [27] “*Underlying Event Studies in Leading Jet Events*”,
Nov. 2007, CDF Note 9087 .
- [28] “*Measurement of the Inclusive Jet Cross Section Using the Midpoint Algorithm in Run II at CDF*”,
July 2007, CDF Notes 8097 and 8192, CDF Public Notes 8374, 8841, and 8928.
- [29] “*Report of the Higgs Trigger Task Force*”,
June 2007, CDF Note 8875.
- [30] “*Relative corrections update: Midpoint algorithm and 2005 data in Run II at CDF*”,
Jan. 2006, CDF Note 8030.
- [31] “*Using MAX/MIN Transverse Regions to Study the Underlying Event in Run 2 at the Tevatron*”,
June 2004, CDF Note 7703.