

## Curriculum Vitae

### 1. Personal data

**Name, first name:** De Lentdecker, Gilles  
**Gender:** M  
**Date and place of birth:** 23/10/1976, Uccle, Belgium  
**Nationality:** Belgian  
**Professional address:** Service de Physique des Particules Élémentaires  
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### 2. Education

**1998-2002** PhD at the Service de Physique des Particules  
Elémentaires, Université Libre de Bruxelles  
*Contribution to the study of the central tracking system  
of the CMS detector, at the future proton collider LHC,  
and to the elaboration of its online triggering system*  
Supervisor: Prof. C. Vander Velde

**1997-1998** Master in Sciences Physiques  
Université Libre de Bruxelles  
Obtained with Great Distinction  
Mémoire: *Etude d'un détecteur à gaz à micro-pistes  
(MICROMEGAS) pour un trajectographe au LHC*  
Supervisor: Prof. C. Vander Velde

### 3. Research Career

- 2006-....:** Research Associate FRS-FNRS (Chercheur Qualifié)  
Research activities: - Search for new neutral gauge bosons decaying in  $e^+e^-$  pairs with the CMS detector.  
- R&D on data acquisition systems based on new electronic standards for future experiments in particle physics.
- Responsibilities: - Since the 1<sup>st</sup> January 2013, coordinating the development of the trigger and data acquisition system for the forward muon spectrometer upgrade of the CMS experiment.
- Teaching: - Exercises (24h/year) and lab work (24h/year) of Physics for BA2 students in Biology, Geology and Geography (~80 students).  
- Lab work in particle physics for BA3 and MA1 students in physics (2-3 weeks/year). I also created workshops on digital electronics for master students.  
- Supervisor of training courses on digital electronics and data acquisition for master students in physics.
- Outreach: - Since 2008, organizing each year, two open days of the laboratory to promote Particle Physics among high school students ("master classes"). Around 35 students attend each class.
- Expert missions: - Referee for IEEE Transaction on Nuclear Science (2005, 2006).  
- Chair of parallel sessions on development of micro pattern gaseous detectors of the IEEE conference.
- Administration: - Member of numerous committees of the ULB Physics Department.  
- Since January 2009, ULB representative at the Belgian Physical Society board.  
- Since January 2012, President of the Belgian Physical Society
- 2005-2006:** Postdoc at Université Libre de Bruxelles, Mandat de retour Belspo  
Research activities: - Search for new neutral gauge bosons decaying in  $e^+e^-$  pairs with the CMS detector.
- Responsibilities: - Construction of the Silicon tracker for the CMS experiment at the LHC.

**2002-2005:** Fellow Instructor (University of Rochester, USA), based at Fermilab, Illinois, USA.

Research activities: - Study of electron pair production at the Tevatron with the CDF detector

Responsibilities: - Coordinator of the online trigger group for the CDF collaboration, 2004 – 2005

Outreach: - Organizer of the Rochester Summer Student Lecture Program in 2004.

**1998-2002:** FRIA Fellow, PhD at the Université Libre de Bruxelles

Research activities: - R&D on micro-pattern gaseous detectors for a LHC tracker

- Study of the CMS online trigger system

#### 4. Scientific achievements

##### Publications

My research activities led to more than 300 published papers, 20 communications at international meetings. The full list of publications is available at [http://www.iihe.ac.be/~dldecker/Doc/cv\\_DeLentdecker.pdf](http://www.iihe.ac.be/~dldecker/Doc/cv_DeLentdecker.pdf)

- In peer reviewed international journals: 367

average number of citations (excluding self-citations): 48.4;  $h_{\text{HEP}}$  index: 65

- Internal notes: 44

- Talks presented at international conferences/workshops: 20 of which 10 invited talks

- Posters presented at international conferences: 10

##### The five most significant publications over the full career:

*1° "Search for resonances in the dilepton mass distribution in pp collisions at  $\sqrt{s}=7$  TeV",*

*the CMS Collaboration,*

*JHEP 1105 (2011) 093*

Between 2006 and 2011, my research activity was focused on the search for massive resonance decaying into  $e^+e^-$  pairs with the CMS experiment, at the LHC. The above paper, written by a collaboration of 20 physicists (the HEEP group), presents the full analysis performed with the first LHC data.

2° *"The CMS experiment at the CERN LHC",  
the CMS Collaboration,  
JINST 3 (2008) S08004*

I am working within the CMS Collaboration for more than 10 years, from the detector design and construction to the physics analysis. This paper describes in details the detector as well as the readout and data acquisition system.

3° *"Search for Z' --> e+ e- Using Dielectron Mass and Angular Distribution"  
C.Ciobanu, G. De Lentdecker, J. Goldstein, S. Harper, T. Junk, J. Lee, K. McFarland, G.  
Veramendi for the CDF Collaboration  
Physical Review Letters 96 (2006) 211801*

From 2002 to 2005, a large part of my research activity was devoted to the study of the e+e- pair production at high mass, with the CDF detector at the Tevatron.

4° *"The Level-3 Trigger at the CDF Experiment at Tevatron Run II"  
Y.S. Chung, G. De Lentdecker, S. Demers, B.Y. Han, B. Kilminster, J. Lee, K. McFarland,  
A. Vaiciulis, F. Azfar, B. Huffman, T. Akimoto, H. Kobayashi, H. Matsunaga, M.  
Shimajima, K. Tollefson, K. Torretta, D. Waters  
IEEE Transactions on Nuclear Science 52 (2005) 1212-1216*

From 2004 to 2005, I coordinated the group responsible for the online trigger system of the CDF experiment. This paper presents the status of the system and the recent developments made by the group.

5° *"High rate behavior and discharge limits in micro-pattern detectors"  
A. Bressan, M. Hoch, P. Pagano, L. Ropelewski, F. Sauli, S. Biagi, A. Buzulutskov, M.  
Gruwe, G. De Lentdecker, D. Moermann, A. Sharma  
Nuclear Instruments and Methods in Physics Research, A424, 1999, 321-342*

Since the beginning of my career I am interested in particle detectors and their instrumentation. This article is an important contribution to the understanding of the behaviour of micro-pattern gaseous detectors addressing the problem of discharge.

### **Research group and thesis supervision**

Within the CMS experiment I am leading a group composed of 1 electronic engineer (ULB staff), 1 postdoc, 1 master student and 3 PhD students. The group is involved in the trigger and data acquisition system design and also in trigger and physics analysis studies. In addition I am also directing 2 PhD theses about the simulation and the measurement of the high-energy neutron dose in protontherapy centers. In the past I supervised 3 master theses. Among them two are doing their PhD at the ULB, the third one is assistant in the engineer department of the ULB.

**Supervision of ongoing theses:**

E. Verhagen: Development of the data acquisition system for the upgrade of the CMS forward muon spectrometer, PhD thesis, Sept. 2010 – Aug. 2014 (expected)

F. Zenoni: Study based on GEANT4 of triple-GEM detectors for the upgrade of the CMS forward muon spectrometer, PhD thesis, Jan. 2011 – Dec. 2015 (expected)

T. Maerschalk: Study based on GARFIELD of triple-GEM detectors for the upgrade of the CMS forward muon spectrometer, PhD thesis, Jan. 2012 – Dec. 2016 (expected)

V. De Smet: MCNPX-based simulations and measurement of the high-energy neutron dose in protontherapy centers, PhD thesis, Jun. 2012 – May. 2016 (expected)

D. Ndayizeye: GEANT4-based simulations and measurement of the high-energy neutron dose in protontherapy centers, PhD thesis, Oct. 2012 – Sept. 2016 (expected)

T. Lenzi: Development of trigger algorithms for the upgrade of the CMS forward muon spectrometer, Master thesis, Sept. 2012 – May 2013

**Past theses:**

G. Mullier: Etude de détecteurs Triple-GEM pour la mise à niveau du spectromètre à muons de l'expérience CMS pour les phases de haute luminosité du LHC, Master thesis, Sept. 2011 – Aug. 2012

T. Maerschalk: Etude d'un grand prototype de chambre à projection temporelle (TPC) et reconstruction de traces par filtre de Kalman, Master thesis, Sept. 2010 – May 2011

L. Thomas: Etude de la production de paires  $e^+e^-$  avec le détecteur CMS au LHC, Master thesis, Sept. 2019 – May 2010

**Member of PhD thesis jury:**

A. Marinov: Feasibility Study of a GEM Based Muon System for the CMS Detector at the Large Hadron Collider, Dec 2012, University of Ghent, Belgium

J. Maes: Estimation of the b-tag efficiency using top quarks at CMS, Nov. 2010, Vrije Universiteit Brussel, Belgium.

## 5. List of publications

### 5.1 Articles with international referees

#### **A new boson with a mass of 125-GeV observed with the CMS experiment at the Large Hadron Collider**

By CMS Collaboration (Chatrchyan et al.);  
Science 338 (2012) 1569-1575

#### **Measurement of associated production of vector bosons and top quark-antiquark pairs at $\sqrt{s} = 7$ TeV**

By CMS Collaboration (Chatrchyan et al.); CMS-TOP-12-014, CERN-PH-EP-2013-033  
Phys.Rev.Lett. 110 (2013) 172002

#### **Search for a Higgs boson decaying into a b-quark pair and produced in association with b quarks in proton-proton collisions at 7 TeV**

By CMS Collaboration (Chatrchyan et al.); CMS-HIG-12-033, CERN-PH-EP-2012-375  
Phys.Lett. B722 (2013) 207-232

#### **Search for new physics in final states with a lepton and missing transverse energy in pp collisions at the LHC**

By CMS Collaboration (Chatrchyan et al.); CMS-EXO-12-010, CERN-PH-EP-2013-010  
Phys.Rev. D87 (2013) 072005

#### **Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s} = 7$ TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1112.5100; CMS-TOP-11-014, CERN-PH-EP-2011-217.  
Phys.Lett. B709 (2012) 28-49

#### **Exclusive photon-photon production of muon pairs in proton-proton collisions at $\sqrt{s} = 7$ TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1111.5536; CMS-FWD-10-005, CERN-PH-EP-2011-187.  
JHEP 1201 (2012) 052, 35p.

#### **J/psi and psi(2S) production in pp collisions at $\sqrt{s} = 7$ TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1111.1557; CMS-BPH-10-014, CERN-PH-EP-2011-177.  
JHEP 1202 (2012) 011, 39p.

#### **Measurement of the Production Cross Section for Pairs of Isolated Photons in pp collisions at $\sqrt{s} = 7$ TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.6461; CMS-QCD-10-035, CERN-PH-EP-2011-171.  
JHEP 1201 (2012) 133, 38.

#### **Measurement of the Rapidity and Transverse Momentum Distributions of Z Bosons in pp Collisions at $\sqrt{s}=7$ TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.4973; CMS-EWK-10-010,CERN-PH-EP-2011-169.  
Phys.Rev. D85 (2012) 032002, 21p.

**Jet Production Rates in Association with W and Z Bosons in pp Collisions at  $\sqrt{s}$  = 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.3226; CMS-EWK-10-012,CERN-PH-EP-2011-125.  
JHEP 1201 (2012) 010, 46p.

**Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.2682; CMS-EWK-11-003,CERN-PH-EP-2011-159.  
Phys.Rev. D84 (2011) 112002, 23p.

**Measurement of energy flow at large pseudorapidities in pp collisions at  $\sqrt{s}$ =0.9 and 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.0211; CMS-FWD-10-011,CERN-PH-EP-2011-086.  
JHEP 1111 (2011) 148, Erratum-ibid. 1202 (2012) 055, 37p.

**Forward Energy Flow, Central Charged-Particle Multiplicities, and Pseudorapidity Gaps in W and Z Boson Events from pp Collisions at 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1110.0181; CMS-FWD-10-008,CERN-PH-EP-2011-141.  
Eur.Phys.J. C72 (2012) 1839, 28p.

**Search for a Vector-like Quark with Charge 2/3 in t + Z Events from pp Collisions at  $\sqrt{s}$  = 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1109.4985; CMS-EXO-11-005,CERN-PH-EP-2011-139.  
Phys.Rev.Lett. 107 (2011) 271802, 25p.

**Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1109.2352;  
Phys.Rev.Lett. 107 (2011) 221804, 27p.

**Measurement of the  $t\bar{t}$  Production Cross Section in pp Collisions at 7 TeV in Lepton + Jets Events Using b-quark Jet Identification.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1108.3773; CMS-TOP-10-003, CERN-PH-EP-2011-085  
Phys.Rev. D84 (2011) 092004, 24p.

**Measurement of the Differential Cross Section for Isolated Prompt Photon Production in pp Collisions at 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1108.2044, CMS-QCD-10-037,CERN-PH-EP-2011-128.

Phys.Rev. D84 (2011) 052011, 29p

**Measurement of the Drell-Yan Cross Section in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration

JHEP 1110 (2011) 007, 40p.

**Search for B(s) and B to dimuon decays in pp collisions at 7 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1107.5834; CMS-BPH-11-002,CERN-PH-EP-2011-120.

Phys.Rev.Lett. 107 (2011) 191802, 27p.

**Search for Resonances in the Dijet Mass Spectrum from 7 TeV pp Collisions at CMS.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1107.4771; CMS-EXO-11-015,CERN-PH-EP-2011-119.

Phys.Lett. B704 (2011) 123-142

**Measurement of the Inclusive W and Z Production Cross Sections in p p Collisions at  $\sqrt{s} = 7$  TeV with the CMS experiment.**

The CMS Collaboration

JHEP 1110 (2011) 132, 74p

**Dependence on pseudorapidity and centrality of charged hadron production in PbPb collisions at a nucleon-nucleon centre-of-mass energy of 2.76 TeV.**

The CMS Collaboration

JHEP 08 (2011) 141, 33p.

**Determination of Jet Energy Calibration and Transverse Momentum Resolution in CMS.**

The CMS Collaboration

JINST 6 (2011) P11002, 64p.

**Search for Three-Jet Resonances in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 107 (2011) 101801, 15p.

**Search for supersymmetry in pp collisions at  $\sqrt{s}=7$  TeV in events with a single lepton, jets, and missing transverse momentum.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1107.1870; CMS-SUS-10-006,CERN-PH-EP-2011-084.

JHEP 1108 (2011) 156, 43p.

**A search for excited leptons in pp Collisions at  $\sqrt{s} = 7$  TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1107.1773; CMS-EXO-10-016,CERN-PH-EP-2011-081.

Phys.Lett. B704 (2011) 143-162

**Measurement of the Underlying Event Activity at the LHC with  $\sqrt{s}=7$  TeV and Comparison with  $\sqrt{s} = 0.9$  TeV.**



By CMS Collaboration (Chatrchyan et al.); arXiv:1107.0330; CMS-JME-10-009,CERN-PH-EP-2011-051.  
JINST 6 (2011) P09001, 56p.

**Missing transverse energy performance of the CMS detector.**

The CMS Collaboration  
JINST 6 (2011) P09001, 54p.

**Search for New Physics with a Mono-Jet and Missing Transverse Energy in  $pp$  Collisions at  $\sqrt{s}=7\text{TeV}$ .**

By CMS Collaboration (Chatrchyan et al.); arXiv:1106.4775; CMS-EXO-11-003,CERN-PH-EP-2011-070  
Phys.Rev.Lett. 107 (2011) 201804, 15p.

**Search for New Physics with Jets and Missing Transverse Momentum in  $pp$  collisions at  $\sqrt{s} = 7 \text{ TeV}$ .**

By CMS Collaboration (Chatrchyan et al.); arXiv:1106.4503; CMS-SUS-10-005,CERN-PH-EP-2011-065.  
JHEP 1108 (2011) 155, 46p.

**Measurement of the Strange B Meson Production Cross Section with  $J/\Psi \phi$  Decays in  $pp$  Collisions at  $\sqrt{s} = 7 \text{ TeV}$ .**

The CMS Collaboration  
Phys.Rev. D84 (2011) 052008, 16p.

**Search for Supersymmetry in Events with  $b$  Jets and Missing Transverse Momentum at the LHC.**

The CMS Collaboration  
JHEP 1107 (2011) 113, 25p.

**Measurement of the  $t$ -channel single top quark production cross section in  $pp$  collisions at  $\sqrt{s} = 7 \text{ TeV}$ .**

The CMS Collaboration  
Phys.Rev.Lett. 107 (2011) 091802, 15p.

**Search for Light Resonances Decaying into Pairs of Muons as a Signal of New Physics.**

The CMS Collaboration  
JHEP 1107 (2011) 098, 33p.

**Search for Same-Sign Top-Quark Pair Production at  $\sqrt{s} = 7 \text{ TeV}$  and Limits on Flavour Changing Neutral Currents in the Top Sector.**

The CMS Collaboration  
JHEP 1108 (2011) 005, 27p.

**Measurement of the Top-antitop Production Cross Section in  $pp$  Collisions at  $\sqrt{s}=7 \text{ TeV}$  using the Kinematic Properties of Events with Leptons and Jets.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1106.0902; CMS-TOP-10-002,CERN-PH-EP-2011-060.  
Eur.Phys.J. C71 (2011) 1721, 27p.

**Search for Physics Beyond the Standard Model Using Multilepton Signatures in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration  
Physics Letters B 704 (2011) 411-433

**Measurement of the Ratio of the 3-jet to 2-jet Cross Sections in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
Phys.Lett. B702 (2011) 336-354

**Measurement of the Inclusive Jet Cross Section in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
Phys.Rev.Lett. 107 (2011) 132001, 14p.

**Measurement of the  $t\bar{t}$  production cross section and the top quark mass in the dilepton channel in pp collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
JHEP 1107 (2011) 049, 48p.

**Search for First Generation Scalar Leptoquarks in the  $e\nu jj$  channel in pp collisions at  $\sqrt{s} = 7$  TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1105.5237; CMS-EXO-10-006,CERN-PH-EP-2011-062.  
Phys.Lett. B703 (2011) 246-266

**Indications of suppression of excited  $Y$  states in PbPb collisions at  $\sqrt{s_{NN}}= 2.76$  TeV.**

The CMS Collaboration  
Phys.Rev.Lett. 107 (2011) 052302, 15p.

**Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
JHEP 1106 (2011) 093, 27p.

**Measurement of W-gamma and Z-gamma production in pp collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
Phys. Lett. B701 (2011), 535-555

**Long-range and short-range dihadron angular correlations in central PbPb collisions at a nucleon-nucleon center of mass energy of 2.76 TeV.**

By CMS Collaboration (Chatrchyan et al.); arXiv:1105.2438; CMS-HIN-11-001,CERN-PH-EP-2011-056.  
JHEP 1107 (2011) 076, 32p.

**Charged particle transverse momentum spectra in pp collisions at  $\sqrt{s} = 0.9$  and 7 TeV.**

The CMS Collaboration  
JHEP 08 (2011) 086, 38p.

**Measurement of the Polarization of W Bosons with Large Transverse Momenta in W+Jets Events at the LHC.**

The CMS Collaboration  
Phys. Rev. Lett. 107 (2011) 021802, 15 p.

**Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC.**

The CMS Collaboration  
JHEP 1106 (2011) 077, 46 p.

**Measurement of the B0 production cross section in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration  
Phys. Rev. Lett. 106, 252001 (2011), 15p.

**Measurement of the differential dijet production cross section in proton-proton collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration  
Phys.Lett. B700 (2011) 187-206

**Measurement of the Inclusive Z Cross Section via Decays to Tau Pairs in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration  
JHEP 1108 (2011) 117, 31p.

**Search for Neutral MSSM Higgs Bosons Decaying to Tau Pairs in pp Collisions at  $\sqrt{s}= 7$  TeV**

The CMS Collaboration  
Phys. Rev. Lett. 106 (2011) 231801, 15p.

**Search for Large Extra Dimensions in the Diphoton Final State at the Large Hadron Collider.**

The CMS Collaboration  
JHEP 1105 (2011) 085, 27p.

**Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at  $\sqrt{s}= 7$  TeV.**

The CMS Collaboration  
JHEP 1104 (2011) 050, 30p.

**Search for Physics Beyond the Standard Model in Opposite-Sign Dilepton Events at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

JHEP 1106 (2011) 026, 32p.

**Search for Supersymmetry in  $pp$  Collisions at  $\sqrt{s}=7\text{TeV}$  in Events with Two Photons and Missing Transverse Energy.**

The CMS Collaboration

Phys. Rev. Lett. 106 (2011) 211802, 15 p.

**Search for Resonances in the Dilepton Mass Distribution in  $pp$  Collisions at  $\sqrt{s}=7\text{TeV}$ .**

The CMS Collaboration

JHEP 1105 (2011) 093, 34p.

**Search for a  $W'$  boson decaying to a muon and a neutrino in  $pp$  collisions at  $\sqrt{s}=7\text{TeV}$ .**

The CMS Collaboration

Phys.Lett. B701 (2011) 160-179

**Measurement of  $W+W^-$  Production and Search for the Higgs Boson in  $pp$  Collisions at  $\sqrt{s} = 7 \text{ TeV}$ .**

The CMS Collaboration

Phys.Lett. B699 (2011) 25-47

**Study of Z boson production in PbPb collisions at nucleon-nucleon centre of mass energy = 2.76 TeV.**

The CMS Collaboration

Phys. Rev. Lett. 106 (2011) 212301, 14p.

**Search for a Heavy Bottom-like Quark in  $pp$  Collisions at  $\sqrt{s}=7\text{TeV}$ .**

The CMS Collaboration

Phys.Lett. B701 (2011) 204-223

**Strange Particle Production in  $pp$  Collisions at  $\sqrt{s} = 0.9$  and 7 TeV.**

The CMS Collaboration

JHEP 1105 (2011) 064, 39p.

**Measurement of B anti-B Angular Correlations based on Secondary Vertex Reconstruction at  $\sqrt{s}=7 \text{ TeV}$ .**

The CMS Collaboration

JHEP 1103 (2011) 136, 34p.

**Measurement of Dijet Angular Distributions and Search for Quark Compositeness in  $pp$  Collisions at  $\sqrt{s}=7\text{TeV}$ .**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 201804, 15p.

**Observation and studies of jet quenching in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV.**

The CMS Collaboration

Phys.Rev. C84 (2011) 024906, 26p.

**First Measurement of Hadronic Event Shapes in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Lett. B699 (2011) 48-67

**Dijet Azimuthal Decorrelations in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 122003, 15p.

**Inclusive b-hadron production cross section with muons in pp collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

JHEP 1103 (2011) 090, 28p.

**Measurement of Bose-Einstein Correlations in pp Collisions at  $\sqrt{s}=0.9$  and 7 TeV.**

The CMS Collaboration

JHEP 1105 (2011) 029, 28p.

**Search for Supersymmetry in pp Collisions at 7 TeV in Events with Jets and Missing Transverse Energy.**

The CMS Collaboration

Phys.Lett. B698 (2011) 196-218

**Search for Heavy Stable Charged Particles in pp collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

JHEP 1103 (2011) 024, 28p.

**Measurement of the  $B^+$  Production Cross Section in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 112001, 15p.

**Search for a heavy gauge boson  $W'$  in the final state with an electron and large missing transverse energy in pp collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Lett. B698 (2011) 21-39

**Upsilon production cross section in pp collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev. D83 (2011) 112004, 27p.

**Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 201802, 7p.

**Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 201803, 7p.

**Search for Microscopic Black Hole Signatures at the Large Hadron Collider.**

The CMS Collaboration

Phys.Lett. B697 (2011) 434-453

**Measurements of Inclusive W and Z Cross Sections in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

JHEP 1101 (2011) 080, 39p.

**Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 082001

**Charged particle multiplicities in pp interactions at  $\sqrt{s} = 0.9, 2.36$ , and 7 TeV.**

The CMS Collaboration

JHEP 1101 (2011) 079, 37p.

**Search for Stopped Gluinos in pp collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 106 (2011) 011801

**Prompt and non-prompt J/ $\psi$  production in pp collisions at  $\sqrt{s} = 7$  TeV.**

The CMS Collaboration

Eur.Phys.J. C71 (2011) 1575, 26p.

**First Measurement of the Cross Section for Top-Quark Pair Production in Proton-Proton Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Lett. B695 (2011) 424-443

**Search for Quark Compositeness with the Dijet Centrality Ratio in pp Collisions at  $\sqrt{s}=7$  TeV.**

The CMS Collaboration

Phys.Rev.Lett. 105 (2010) 262001, 7p.

**Search for Dijet Resonances in 7 TeV pp Collisions at CMS.**

The CMS Collaboration

Phys.Rev.Lett. 105 (2010) 211801, 7p.

**Observation of Long-Range Near-Side Angular Correlations in Proton-Proton Collisions at the LHC.**

The CMS Collaboration

JHEP 1009 (2010) 091

**CMS Tracking Performance Results from early LHC Operation.**

The CMS Collaboration

Eur.Phys.J. C70 (2010) 1165-1192

**First Measurement of the Underlying Event Activity at the LHC with  $\sqrt{s} = 0.9$  TeV.**

The CMS Collaboration

Eur.Phys.J. C70 (2010) 555-572

**Measurement of the charge ratio of atmospheric muons with the CMS detector**

The CMS Collaboration

Phys.Lett.B692, 83-104, 2010.

**Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at  $\sqrt{s} = 7$  TeV**

The CMS Collaboration

Phys.Rev.Lett.105, 022002, 2010, 7 p.

**First Measurement of Bose-Einstein Correlations in Proton-Proton Collisions at  $\sqrt{s}=0.9$  and 2.36 TeV at the LHC**

The CMS Collaboration

Phys.Rev.Lett.105, 032001, 2010, 7 p.

**Transverse momentum and pseudorapidity distributions of charged hadrons in pp collisions at  $\sqrt{s} = 0.9$  and 2.36 TeV**

The CMS Collaboration

JHEP 1002:041,2010

**Commissioning and Performance of the CMS Pixel Tracker with Cosmic Ray Muons**

The CMS Collaboration

JINST 5 T03007, 2010, 37p.

**Performance of the CMS Level-1 Trigger during Commissioning with Cosmic Ray Muons**

The CMS Collaboration

JINST 5 T03002, 2010, 50 p.

**Measurement of the Muon Stopping Power in Lead Tungstate**

The CMS Collaboration

JINST 5 P03007, 2010, 31 p.

**Commissioning and Performance of the CMS Silicon Strip Tracker with Cosmic Ray Muons**

The CMS Collaboration

JINST 5 T03008, 2010, 45 p.

**Performance of CMS Muon Reconstruction in Cosmic-Ray Events**

The CMS Collaboration

JINST 5 T03022, 2010, 47p

**Performance of the CMS Cathode Strip Chambers with Cosmic Rays**

The CMS Collaboration  
JINST 5 T03018, 2010, 39 p

**Performance of the CMS Hadron Calorimeter with Cosmic Ray Muons and LHC Beam Data**

The CMS Collaboration  
JINST 5 T03012, 2010, 35 p.

**Fine Synchronization of the CMS Muon Drift-Tube Local Trigger using Cosmic Rays**

The CMS Collaboration  
JINST 5 T03004, 2010, 33 p.

**Calibration of the CMS Drift Tube Chambers and Measurement of the Drift Velocity with Cosmic Rays**

The CMS Collaboration  
JINST 5 T03016, 2010, 37 p.

**Performance of the CMS Drift-Tube Local Trigger with Cosmic Rays**

The CMS Collaboration  
JINST 5 T03003, 2010, 31 p.

**Commissioning of the CMS High-Level Trigger with Cosmic Rays**

The CMS Collaboration  
JINST 5 T03005, 2010, 31 p.

**Identification and Filtering of Uncharacteristic Noise in the CMS Hadron Calorimeter**

The CMS Collaboration  
JINST 5 T03014, 2010, 29 p.

**Performance of CMS Hadron Calorimeter Timing and Synchronization using Test Beam, Cosmic Ray, and LHC Beam Data**

The CMS Collaboration  
JINST 5 T03013, 2010, 31 p.

**Performance of the CMS Drift Tube Chambers with Cosmic Rays**

The CMS Collaboration  
JINST 5 T03015, 2010, 46 p.

**Commissioning of the CMS Experiment and the Cosmic Run at Four Tesla**

The CMS Collaboration  
JINST 5 T03001, 2010, 44 p.

**CMS Data Processing Workflows during an Extended Cosmic Ray Run**

The CMS Collaboration  
JINST 5 T03006, 2010, 43 p.

**Aligning the CMS Muon Chambers with the Muon Alignment System during an Extended Cosmic Ray Run**



The CMS Collaboration  
JINST 5 T03019, 2010, 34 p.

**Performance Study of the CMS Barrel Resistive Plate Chambers with Cosmic Rays**  
The CMS Collaboration  
JINST 5 T03017, 2010, 33 p.

**Time Reconstruction and Performance of the CMS Electromagnetic Calorimeter**  
The CMS Collaboration  
JINST 5 T03011, 2010, 27 p.

**Alignment of the CMS Muon System with Cosmic-Ray and Beam-Halo Muons**  
The CMS Collaboration  
JINST 5 T03020, 2010, 41 p.

**Precise Mapping of the Magnetic Field in the CMS Barrel Yoke using Cosmic Rays**  
The CMS Collaboration  
JINST 5 T03021, 2010, 36 p.

**Performance and Operation of the CMS Electromagnetic Calorimeter**  
The CMS Collaboration  
JINST 5 T03010, 2010, 39 p.

**Alignment of the CMS Silicon Tracker during Commissioning with Cosmic Rays**  
The CMS Collaboration  
JINST 5 T03009, 2010, 39 p.

**Search for TeV  $e^+e^-$  resonances at 10 TeV**  
The CMS Collaboration  
CMS Physics Analysis Summary, PAS EXO-09-006, 2009, 15 p.

**Alignment of the CMS Silicon Strip Tracker during stand-alone Commissioning**  
CMS Tracker Collaboration (W. Adam et al.)  
JINST 4 T07001, 2009, 41 p.

**Stand-alone Cosmic Muon Reconstruction Before Installation of the CMS Silicon Strip Tracker**  
The CMS Tracker Collaboration (W. Adam et al.)  
JINST 4 P05004, 2009, 29 p.

**Performance studies of the CMS Strip Tracker before installation**  
The CMS Tracker Collaboration  
JINST 4 P06009, 2009, 40 p.

**Search for Maximal Flavor Violating Scalars in Same-Charge Lepton Pairs in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$ -TeV**  
T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.102, 041801, 2009, 4p.

**Search for massive resonance production decaying into in an electron or a photon pair**

The CMS Collaboration

CMS Physics Analysis Summary, PAS EXO-08-001, 2008, 15 p.

**The CMS Experiment at the CERN LHC**

S Chatrchyan et al., The CMS Collaboration

JINST 3 S08004, 2008, 361 p.

**The CMS tracker operation and performance at the Magnet Test and Cosmic Challenge**

W. Adam et al., The CMS Tracker End Caps Collaboration

JINST (Journal of Instrumentation), 2008, Institute of Physics Publishing and SISSA, IOP, Electronic Journal, 3 P07006, 58p

**Search for Doubly Charged Higgs Bosons with Lepton-Flavor-Violating Decays involving Tau Leptons.**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.Lett.101, 121801, 2008, 7 p.

**Search for Heavy, Long-Lived Neutralinos that Decay to Photons at CDF II Using Photon Timing**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.D78, 032015, 2008, 27 p.

**Search for Hadronic Decays of W and Z Bosons in Photon Events in p anti-p Collisions at  $s^{**}(1/2) = 1.96\text{-GeV}$**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.D80, 052011, 2009, 17 p.

**Search for Pair Production of Scalar Top Quarks Decaying to a tau Lepton and a b Quark in ppbar Collisions at  $\sqrt{s}=1.96\text{ TeV}$**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.Lett.101, 071802, 2008, 8p.

**Two-Particle Momentum Correlations in Jets Produced in p anti-p Collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.D77, 092001, 2008

**Search for the Higgs boson in events with missing transverse energy and b quark jets produced in proton-antiproton collisions at  $s^{**}(1/2)=1.96\text{ TeV}$**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.Lett.100, 211801, 2008, 8p.

**First Measurement of ZZ Production in panti-p Collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.Lett.100, 201801, 2008, 7p.

**Measurement of Ratios of Fragmentation Fractions for Bottom Hadrons in p anti-p Collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 072003, 2008, 54 p.

**Search for Heavy Top-like Quarks Using Lepton Plus Jets Events in 1.96-TeV p anti-p Collisions**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 161803, 2008, 7p.

**Search for New Heavy Particles Decaying to  $Z^0 Z^0 \rightarrow e^+e^-e^+e^-$  in p - anti-p Collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D78, 012008, 2008, 12p.

**First measurement of the fraction of top quark pair production through gluon-gluon fusion**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D78, 111101, 2008, 6p.

**First Flavor-Tagged Determination of Bounds on Mixing-Induced CP Violation in  $B^0(s) \rightarrow J/\psi \phi$  Decays**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 161802, 2008, 7p.

**Measurement of lifetime and decay-width difference in  $B^0(s) \rightarrow J/\psi \phi$  decays**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 121803, 2008, 7p.

**Evidence for  $D^0$  - anti- $D^0$  mixing using the CDF II Detector**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 121802, 2008, 7p.

**Search for  $B^0(s) \rightarrow \mu^+ \mu^-$  and  $B^0(d) \rightarrow \mu^+ \mu^-$  decays with  $2\text{fb}^{-1}$  of p anti-p collisions**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 101802, 2008, 7p.

**Observation of the Decay  $B_{s1} \rightarrow J/\psi \pi^+ \pi^-$  and Measurement of the  $B_{s1}$  Mass**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 182002, 2008, 7p.

**Model-Independent and Quasi-Model-Independent Search for New Physics at CDF**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D78, 012002, 2008, 39p.

**Observation of Exclusive Dijet Production at the Fermilab Tevatron p-pbar Collider**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 052004, 2008, 27p.

**Measurement of the cross section for W-boson production in association with jets in ppbar collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 011108, 2008

**Measurement of inclusive jet cross-sections in Z/gamma\*(---> e+ e-) + jets production in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 102001, 2008, 7p.

**Search for chargino-neutralino production in p anti-p collisions at 1.96-TeV with high-p(T) leptons**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 052002, 2008, 22p.

**First measurement of the production of a W boson in association with a single charm quark in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 091803, 2008, 7p.

**Limits on the production of narrow t anti-t resonances in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 051102, 2008, 7p.

**Search for Standard Model Higgs Bosons Produced in Association with W Bosons**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 041801, 2008, 7p.

**Observation of orbitally excited B(s) mésons**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 082001, 2008, 7p.

**CMS Technical Design Report, Volume II: Physics Performance**

G.L. Bayatian et al., The CMS Collaboration  
J.Phys.G 34, 2007, 995-1579.

**A Direct measurement of the W boson width in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 071801, 2008, 7p.

**Cross-section constrained top quark mass measurement from dilepton events at the Tevatron**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 062005, 2008, 7p.

**First Observation of the Decay  $B(s)0 \rightarrow D(s)^- D(s)^+$  and Measurement of Its Branching Ratio**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 021803, 2008, 7p.

**Measurement of correlated  $b$ - $b$ bar production in  $p$ - $p$ bar collisions at  $\sqrt{s} = 1960$  GeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 072004, 2008, 55p.

**Search for resonant  $t$  anti- $t$  production in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.100, 231801, 2008, 7p.

**First Run II Measurement of the W Boson Mass**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D77, 112001, 2008, 54 p.

**Search for Direct Pair Production of Supersymmetric Top and Supersymmetric Bottom Quarks in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D76, 072010, 2007, 12p.

**Search for new physics in high mass electron-positron events in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 171802, 2007, 7p.

**Search for exclusive  $\gamma\gamma$  production in hadron-hadron collisions**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 242002, 2007, 7p.

**Search for chargino-neutralino production in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 191806, 2007, 8p.

**Search for a high-mass diphoton state and limits on Randall-Sundrum gravitons at CDF**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 171801, 2007, 10p.

**Observation and mass measurement of the baryon  $\Xi(b)^-$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 052002, 2007, 8p.

**First measurement of the W boson mass in run II of the Tevatron**

T. Aaltonen et al., The CDF Collaboration

Phys.Rev.Lett.99, 151801, 2007, 7p.

**CMS physics technical design report: Addendum on high density QCD with heavy ions**

D. G. d'Enterria et al., The CMS Collaboration  
J.Phys.G34, 2307-2455, 2007, 169p.

**First observation of heavy baryons  $\Sigma(b)$  and  $\Sigma(b)^*$**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.99, 202001, 2007, 8p.

**Measurement of the  $p$  anti- $p \rightarrow t$  anti- $t$  production cross-section and the top quark mass at  $\sqrt{s} = 1.96$ -TeV in the all-hadronic decay mode**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D76, 072009, 2007, 29p.

**Search for New Particles Leading to Z+jets Final States in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D76, 072006, 2007, 23p.

**Limits on Anomalous Triple Gauge Couplings in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$ -TeV**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D76, 111103, 2007, 7p.

**Measurement of the top-quark mass using missing  $E(T)$  + jets events with secondary vertex b-tagging at CDF II**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.D75, 111103, 2007, 8p.

**Search for heavy, long-lived particles that decay to photons at CDF II**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.Lett.99, 121801, 2007, 7p.

**Polarization of  $J/\psi$  and  $\psi(2S)$  mesons produced in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.Lett.99, 132001, 2007, 7p.

**Precise measurement of the top quark mass in the lepton+jets topology at CDF II**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.99, 182002, 2007, 7p.

**Measurement of  $\sigma(\chi(c2)B(\chi(c2)) \rightarrow J/\psi \gamma) / \sigma(\chi(c1)B(\chi(c1)) \rightarrow J/\psi \gamma)$  in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.98, 232001, 2007, 7p.

**Inclusive search for new physics with like-sign dilepton events in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.98, 221803, 2007, 8.

**Measurement of  $\sigma$  p anti-p  $\rightarrow Z \cdot \text{Br}(Z \rightarrow 2\tau)$  in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{ TeV}$**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.D75, 092004, 2007, 24 p.

**First Measurement of the Ratio of Central-Electron to Forward-Electron W Partial Cross Sections in p anti-p Collisions at  $s^{**}(1/2) = 1.96\text{ TeV}$**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.98, 251801, 2007, 7p.

**Search for new physics in lepton + photon + X events with  $929\text{ pb}^{**}(-1)$  of p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.D75, 112001, 2007, 15 p.

**Observation of WZ Production**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.98:161801,2007, 7 p.

**Measurement of the Inclusive Jet Cross Section using the  $k(T)$  algorithm in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$  with the CDF II Detector**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.D75, 092006, 2007, 26p.  
Erratum-ibid.D75, 119901, 2007

**Search for anomalous production of multi-lepton events in p anti-p collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$**

A. Abulencia et al., the CDF Collaboration  
Phys.Rev.Lett.98, 131804, 2007, 7p.

**Search for Exotic  $S = -2$  Baryons in p anti-p Collisions at  $s^{**}(1/2) = 1.96\text{ TeV}$**

A. Abulencia et al., The CDF Collaboration  
Physical Review D, F.I.: 5,1560, 2007, 75, 032003, 10p.

**Measurement of the Top Quark Mass in p anti-p Collisions at  $s^{**}(1/2) = 1.96\text{-TeV}$  using the Decay Length Technique**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.D75, 071102, 2007, 23 p.

**Precision Measurement of the Top-Quark Mass from Dilepton Events at CDF II**

A. Abulencia et al., The CDF Collaboration  
Physical Review D, F.I.: 5,1560, 2007, 75, 031105, 7p.

**Cross Section Measurements of High-p(T) Dilepton Final-State Processes Using a Global Fitting Method**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.D78, 012003, 2008, 20p.

**Measurement of the top-quark mass in all-hadronic decays in p anti-p collisions at CDF II**

T. Aaltonen et al., The CDF Collaboration  
Phys.Rev.Lett.98, 142001, 2007, 7 p.

**Measurement of the helicity fractions of W bosons from top quark decays using fully reconstructed t anti-t events with CDF II**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.D75, 052001, 2007, 11p.

**Observation of Exclusive Electron-Positron Production in Hadron-Hadron Collisions**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.Lett.98, 112001, 2007, 7 p.

**Search for W-prime boson decaying to electron-neutrino pairs in p anti-p collisions at  $\sqrt{s} = 1.96$ -TeV**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.D75, 091101, 2007, 7p.

**Measurement of the Ratios of Branching Fractions  $B(B^0(s) \rightarrow D^-(s) \pi^+ \pi^+ \pi^-) / B(B^0 \rightarrow D^- \pi^+ \pi^+ \pi^-)$  and  $B(B^0(s) \rightarrow D^-(s) \pi^+) / B(B^0 \rightarrow D^- \pi^+)$**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.Lett.98, 061802, 2007, 7p.

**Observation of  $B^0(s)$  - anti- $B^0(s)$  Oscillations**

A. Abulencia et al., The CDF Collaboration  
Phys.Rev.Lett.97, 242003, 2006, 9 p.

**Measurement of the  $\Lambda_b^0$  Lifetime in  $\Lambda_b^0 \rightarrow J/\psi \Lambda_b^0$  in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., The CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2007, 98, 122001, 7 p.

**Search for V + A Current in Top Quark Decay in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., The CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2007, 98, 072001, 7p.

**Measurement of the tt-bar Production Cross Section in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV in the all Hadronic Decay Mode**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 74, 072005, 10 p.



**Measurement of the  $t\bar{t}$  Production Cross Section in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV using Lepton + Jets Events with Jet Probability  $b$ -tagging**

A. Abulencia et al., the CDF Collaboration (628 auteurs) Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 74, 072006, 45 p.

**Observation of  $B^0(s) \rightarrow K^+ K^-$  and Measurements of Branching Fractions of Charmless Two-body Decays of  $B^0$  and  $B^0(s)$  Mesons in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., The CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2006, 97, 211802, 7 p.

**Search for Excited and Exotic Muons in the  $\mu$   $\gamma$  Decay Channel in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 191802, 7 p.

**Measurement of the  $B^0(s) \rightarrow B^0$  Oscillation Frequency**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 062003, 7p.

**Measurement of the  $t\bar{t}$  Production Cross Section in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 082004, 7 p.

**Search for a Neutral Higgs Boson Decaying to a  $W$  Boson Pair in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 081802, 7p.

**Top Quark Mass Measurement from Dilepton Events at CDF II with the Matrix-Element Method**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 74, 032009, 21 p.

**Measurement of the  $b$  jet cross-section in events with a  $Z$  boson in  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
**Phys.Rev.D74, 032008, 2006, 28 p.**

**Search for new physics in lepton + photon +  $X$  events with 305  $\text{pb}^{-1}$  of  $p$  anti- $p$  collisions at  $\sqrt{s} = 1.96$ -TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
**Phys.Rev.Lett.97, 031801, 2006, 8 p.**

**Measurement of the Ratio of Branching Fractions  $B(D^0 \rightarrow K^+ \pi^-)/B(D^0 \rightarrow K^- \pi^+)$  using the CDF II Detector**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 74, 031109, 7

**Search for Large Extra Dimensions in the Production of Jets and Missing Transverse Energy in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 171802, 7 p.

**Measurement of the  $t\bar{t}$  Production Cross Section in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV using Missing E(t) + jets Events with Secondary Vertex b-Tagging**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 202002, 7p.

**Measurement of the  $B^+_c$  Meson Lifetime Using  $B^+_c \rightarrow J/\psi e^+ \nu_e$**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 97, 012002, 15 p.

**Search for High-Mass Resonances Decaying to  $e \mu$  in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 211802, 16 p.

**Search for  $Z' \rightarrow e^+ e^-$  Using Dielectron Mass and Angular Distribution**

C.Ciobanu, G. De Lentdecker, J. Goldstein, S. Harper, T. Junk, J. Lee, K. McFarland, G. Veramendi for the CDF Collaboration

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 211801, 7 p.

**Measurement of the Top Quark Mass using Template Methods on Dilepton Events in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 112006, 52 p.

**Observation of  $B^0(s) \rightarrow \psi(2S)\phi$  and Measurement of Ratio of Branching Fractions  $B(B^0(s) \rightarrow \psi(2S)\phi)/B(B^0(s) \rightarrow J/\psi \phi)$**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 231801, 14 p.

**The CMS High level trigger**

W. Adam et al., the CMS Trigger and Data Acquisition Group,  
Eur.Phys.J.C46, 605-667, 2006

**Measurement of the Dipion Mass Spectrum in  $X(3872) \rightarrow j/\psi \pi^+ \pi^-$  Decays**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 102002, 7 p.

**A Search for Scalar Bottom Quarks from Gluino Decays in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 171802, 7 p.

**Top Quark Mass Measurement from Dilepton Events at CDF II**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 152002, 7 p.

**Measurement of Mass and Width of the Excited Charmed Meson States  $D^*_0$  and  $D^*_0$  at CDF**

A. Abulencia et al., the CDF Collaboration (628 auteurs) Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 051104, 9 p.

**Search for Anomalous Semileptonic Decay of Heavy Flavor Hadrons Produced in Association with a W Boson at CDF II**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 051101, 8 p.

**Measurement of the Inclusive Jet Cross Section using the  $K_T$  Algorithm in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 122001, 7 p.

**Search for Higgs Bosons Decaying to  $b\bar{b}$  and Produced in Association with W Bosons in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 081803, 7 p.

**Search for Second-Generation Scalar Leptoquarks in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 051102, 8 p.

**Measurement of the inclusive jet cross section in p anti-p interactions at  $\sqrt{s} = 1.96$ -TeV using a cone-based**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, 2006, 74, 071103, 19 p.

**Measurement of the Top Quark Mass with the Dynamical Likelihood Method using Lepton plus Jets Events with b-tags in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 092002, 66 p.

**Measurement of the Helicity of W Bosons in Top-Quark Decays**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 111103, 7 p.

**Search for Charged Higgs Bosons from Top Quark Decays in p anti-p Collisions at  $\sqrt{s} = 1.96$  TeV**

Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 042003, 7 p.

**A Search for  $t \rightarrow \tau \nu q$  in t anti-t production**

Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Letters, B, 2006, 639, 172, 7 p.

**Precision Top Quark Mass Measurement in the Lepton + Jets Topology in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 022004, 16 p.

**Top Quark Mass Measurement Using the Template Method in the Lepton + Jets Channel at CDF II**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2006, American Physical Society, 73, 032003, 77 p.

**Direct Search for Dirac Magnetic Monopoles in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 201801, 7 p.

**Search for Neutral Higgs Bosons of the Minimal Supersymmetric Standard Model Decaying to tau Pairs in p anti-p Collisions at  $s^{1/2} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 011802, 7p.

**Measurements of inclusive W and Z cross sections in p anti-p collisions at  $s^{1/2} = 1.96$ -TeV**

A. Abulencia et al., the CDF Collaboration  
J.Phys. G 34, 2457-2544, 2007

**Measurement of the Bottom-Quark Hadron Masses in Exclusive J/psi Decays with the CDF Detector**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 202001, 7 p.

**Measurement of the Ratios of Branching Fractions  $B(B^0(s) \rightarrow D(s) \pi^{++})/B(B^0 \rightarrow D \pi^{++})$  and  $B(B^+ \rightarrow D \pi^{++})/B(B^0 \rightarrow D \pi^{++})$**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 191801, 7 p.

**Evidence for the Exclusive Decay  $B^+ \rightarrow J/\psi \pi^+ \pi^0$  and Measurement of the Mass of the  $B^+ \rightarrow J/\psi \pi^+ \pi^0$  Meson**

A. Abulencia et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, American Physical Society, 96, 082002, 7 p.

**Observation of  $B^0 \rightarrow B^0 \pi^0$  Oscillations**

A. Abulencia et al., The CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2006, 97, 242003

**Observation of  $B^0(s) \rightarrow K^+ K^-$  and Measurements of Branching Fractions of Charmless Two-body Decays of  $B^0$  and  $B^0(s)$  Mesons in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., The CDF Collaboration

Physical Review Letters, F.I.: 7,2180, 2006, 97, 211802

**The effect of highly ionising particles on the CMS silicon strip tracker**

W. Adam et al., for the CMS Tracker Collaboration (140 auteurs)

Nuclear Instruments and Methods A, F.I.: 1,3490, 2005, Elsevier, Amsterdam, 543, 463-482

**The Level-3 Trigger at the CDF Experiment at Tevatron Run II**

Y.S. Chung, G. De Lentdecker, S. Demers, B.Y. Han, B. Kilminster, J. Lee, K. McFarland, A. Vaiciulis, F. Azfar, B. Huffman, T. Akimoto, H. Kobayashi, H. Matsunaga, M. Shimojima, K. Tollefson, K. Torretta, D. Waters

IEEE Transactions on Nuclear Science, F.I.: 1,7370, 2005, 52, 1212-1216

**Measurement of the Forward-Backward Charge Asymmetry of Electron-Positron Pairs in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

Greg Veramendi, Adam Gibson, Young-kee Kim, and Gilles De Lentdecker (for the CDF Collaboration)

Physical Review D, F.I.: 4,6000, 2005, American Physical Society, 71, 30 p.

**Search for New High Mass Particles Decaying to Lepton Pairs in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

A. Abulencia et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 4

**Search for First-Generation Scalar Leptoquarks in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 72, 4

**Recent physics results from the CDF and D0 experiments at the Tevatron**

G. De Lentdecker, for the CDF and D0 Collaborations

Nuclear Physics A, F.I.: 2,1080, 2005, Elsevier, Amsterdam, 755, 583-586

**Search for  $B^0 \rightarrow \mu^+ \mu^-$  and  $B^0_d \rightarrow \mu^+ \mu^-$  Decays in  $pp$ -bar Collisions with CDF II**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 7 p.

**Search for New Physics Leading to High Mass Tau Pairs with  $pp$ -bar Collisions at 1.96 TeV Using CDF II**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 7 p.

**Search for  $\Lambda_b^0 \rightarrow p \pi$  and  $\Lambda_b^0 \rightarrow p K$  Decays in  $pp$ -bar Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 72, 7 p.

**Measurement of the Cross Section for  $t\bar{t}$  Production in  $p\bar{p}$  Collisions using the Kinematics of Lepton + Jets Events**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 72, 31 p.

**Search for Scalar Leptoquark Pairs Decaying to  $\nu \nu\text{-bar} q\bar{q}$  in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV** D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 7 p.

**Search for ZZ and ZW Production in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**  
D. Acosta et al., the CDF Collaboration (628 auteurs) Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 7 p.

**Measurement of the Forward-Backward Charge Asymmetry from  $W \rightarrow e \nu$  Production in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 18 p.

**Measurement of  $B(t \rightarrow Wb)/B(t \rightarrow Wq)$  at the Collider Detector at Fermilab**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 7 p.

**Search for Long-Lived Doubly-Charged Higgs Bosons in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs) Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 14 p.

**Study of Jet Shapes in Inclusive Jet Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 27 p.

**Measurement of the Cross Section for Prompt Diphoton Production in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 7 p.

**Measurement of the Moments of the Hadronic Invariant Mass Distribution in Semileptonic B Decays**

D. Acosta et al., the CDF Collaboration (628 auteurs)  
Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 9 p.

**Measurement of the Lifetime Difference Between  $B_s$  Mass Eigenstates**

D. Acosta et al., the CDF Collaboration  
Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 94, 8 p.

**Measurement of the  $t\bar{t}$  Production Cross Section in  $pp$ -bar Collisions at  $\sqrt{s} = 1.96$  TeV Using Lepton Plus Jets Events with Semileptonic B Decays to Muons**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 72, 25 p.

**First Evidence for  $B_s^0 \rightarrow \phi \phi$  Decay and Measurements of Branching Ratio and  $A_{CP}$  for  $B^+ \rightarrow \phi K^+$**

D. Acosta et al., the CDF Collaboration Physical Review Letters, F.I.: 7,2180, 2005,

American Physical Society, 95, 7 p.

**Measurement of the  $J/\psi$  Meson and  $b$ -Hadron Production Cross Sections in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  GeV**

D. Acosta et al., the CDF Collaboration

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 56

**Measurement of  $W$  and  $Z$  Production in  $pp$ -bar Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 94, 9 p.

**Search for Anomalous Production of Diphoton Events with Missing Transverse Energy at CDF and Limits on Gauge-Mediated Supersymmetry-Breaking Models**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 9 p.

**Search for Excited and Exotic Electrons in the  $e$   $\gamma$  Decay Channel in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 94, 7 p.

**Measurement of the  $t\bar{t}$  Production Cross Section in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV using Lepton + Jets Events with Secondary Vertex  $b$ -tagging**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 28 p.

**Measurement of Partial Widths and Search for Direct CP Violation in  $D^0$  Meson Decays**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 94, 7 p.

**Measurement of the  $t$  anti- $t$  Production Cross Section in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV Using Kinematic Fitting of  $b$ -tagged Lepton + Jet Events**

D. Acosta et al., the CDF Collaboration

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 28 p.

**First Measurements of Inclusive  $W$  and  $Z$  Cross Sections from Run II of the Tevatron Collider**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 8 p.

**Search for Anomalous Kinematics in  $t$  anti- $t$  Dilepton Events at CDF II**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 95, 14 p.

**Measurement of the  $W+W^-$  Production Cross Section in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV using Dilepton Events**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2005, American Physical Society, 94, 8 p.

**Search for Electroweak Single Top Quark Production in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration

Physical Review D, F.I.: 5,1560, 2005, American Physical Society, 71, 7 p.

**Search for Doubly-Charged Higgs Bosons Decaying to Dileptons in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration

Physical Review Letters, F.I.: 7,2180, 2004, American Physical Society, 93, 8 p.

**Measurement of the  $t\bar{t}$  Production Cross Section in  $pp$ -bar Collisions at  $\sqrt{s} = 1.96$  TeV Using Dilepton Events**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2004, American Physical Society, 93, 7 p.

**Observation of the Narrow State  $X(3872) \rightarrow J/\psi \pi^+ \pi^-$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., for the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2004, American Physical Society, 93, 7 p.

**Search for  $B^0(s) \rightarrow \mu^+ \mu^-$  and  $B^0(d) \rightarrow \mu^+ \mu^-$  Decays in  $p$  anti- $p$  Collisions at  $\sqrt{s} = 1.96$  TeV**

D. Acosta et al., the CDF Collaboration (628 auteurs)

Physical Review Letters, F.I.: 7,2180, 2004, American Physical Society, 93, 7 p.

**Experimental and simulation study of the behaviour and operation modes of MSGC+GEM detectors**

M. Ageron, A. Albert, T. Barvich, W. Beaumont, T. Beckers, K. Bernier, P. Blum, I. Boulogne, D. Bouvet, J.M. Brom, F. Charles, J. Coffin, D. Contardo, E. Daubie, F. Didierjean, M. Erdmann, G. De Lentdecker, J. De Troy, O. Devroede, J.P. Ernenwein M. Fahrner, G. Flugge, J.C. Fontaine, W. Geist, U. Goerlach, M. Gottschalk, J.M. Helleboid, D. Huss, K. Karcher, F. Kuhn, P. Juillot, A. Lounis, C. Maazouzi, D. Macke, C. Martin, L. Mirabito, S. Moreau, T. Muller, D. Neuberger, A. Nowack, S. Perries, I. Ripp-Baudot, F. Roderer, R. Schulte, L. Shekhtman, H.J. Simonis, W. Struczinski, A. Tatarinov, W.H. Thummel, F. Udo, C. Vander Velde, W. Van Doninck, C. Van Dyck, P. Vanlaer, L. Van Lancker, T. Weiler, A. Zander, A. Zghiche, V. Zhukov

Nuclear Instruments and Methods A, F.I.: 1,1670, 2002, Elsevier, Amsterdam, 489, 121-139



**Simulation study of silicon and gaseous tracking detectors**

W. Beaumont, T. Beckers, G. De Lentdecker, O. Devroede, F. Udo, C. Vander Velde, W. Van Van Doninck, C. Van Dyck, P. Vanlaer, F. Verbeure, V. Zhukov  
Nuclear Instruments and Methods A, F.I.: 1,1670, 2002, Elsevier, Amsterdam, 478, 448-451

**Operations of MSGC+GEM detectors in a high rate environment**

A. Nowack and A. Zander, for the CMS-Forward MSGC Collaboration  
Nuclear Instruments and Methods A, F.I.: 1,1670, 2002, Elsevier, Amsterdam, 478, 250-253

**Large scale test of MSGC+GEM detectors in a high intensity hadron beam**

V. Zhukov, For the CMS-Forward MSGC Collaboration  
Nuclear Instruments and Methods A, F.I.: 1,0910, 2001, Elsevier, Amsterdam, 461, 118-120

**Robustness test of a system of MSGC+GEM detectors at the cyclotron facility of the Paul Scherrer institute**

M. Ageron, A. Albert, T. Barvich, W. Beaumont, T. Beckers, K. Bernier, P. Blum, O. Bouhali, I. Boulogne, D. Bouvet, J.M. Brom, F. Charles, J. Coffin, D. Contardo, E. Daubie, F. Didierjean, M. Erdmann, G. De Lentdecker, J. De Troy, O. Devroede, J.P. Ernenwein M. Fahrner, G. Flugge, J.C. Fontaine, W. Geist, U. Goerlach, M. Gottschalk, J.M. Helleboid, D. Huss, F. Iacopi, K. Karcher, F. Kuhn, P. Juillot, A. Lounis, C. Maazouzi, D. Macke, C. Martin, L. Mirabito, S. Moreau, T. Muller, D. Neuberger, A. Nowack, S. Perries, I. Ripp-Baudot, F. Roderer, R. Schulte, L. Shekhtman, H.J. Simonis, W. Struczinski, A. Tatarinov, W.H. Thummel, F. Udo, C. Vander Velde, W. Van Doninck, C. Van Dyck, P. Vanlaer, L. Van Lancker, T. Weiler, A. Zander, A. Zghiche, V. Zhukov  
Nuclear Instruments and Methods A, F.I.: 1,0910, 2001, Elsevier, Amsterdam, 471, 380-391

**The MICROMEGET detector**

O. Bouhali, G. De Lentdecker, S. Deweze, F. Udo, W. Van Doninck, C. Vander Velde, L. Van Lancker, V. Zhukov, I. Boulogne, E. Daubie  
Nuclear Instruments and Methods in Physics Research A, F.I.: 1,0910, 2001, Elsevier, Amsterdam, 459, 211-220

**High rate behavior and discharge limits in micro-pattern detectors**

A. Bressan, M. Hoch, P. Pagano, L. Ropelewski, F. Sauli, S. Biagi, A. Buzulutskov, M. Gruwe, G. De Lentdecker, D. Moermann, A. Sharma  
Nuclear Instruments and Methods in Physics Research A, F.I.: 1,0910, 1999, Elsevier, Amsterdam, 424, 321-342

**5.2 Articles with internal referees**

**Search for Resonances in the Dilepton Mass Distribution in pp Collisions at  $\sqrt{s} = 7$  TeV**

The CMS Collaboration,  
CMS EXO-2010/013

**Search for high-mass resonances decaying into an electron pair at 10 TeV with 100 pb-1**

The CMS Collaboration,  
CMS EXO-2009/006

**Search for massive resonance production decaying into an electron pair in the CMS experiment**

The CMS Collaboration,  
CMS EXO-2008/001

**Technical Proposal for the Upgrade of the CMS Detector Through 2020**

The CMS Collaboration, CERN-LHCC-2011-0016

**CMS expression of interest in the SLHC**

CMS Collaboration (J. Nash, (Ed.) *et al.*), CERN-LHCC-2007-014, CERN-LHCC-G-131, Mar 2007. 56 p.

**CMS High Level Trigger**

The CMS Collaboration, CERN/LHCC 2007-021

**CMS Physics Technical Design Report, Volume II: Physics Performance**

The CMS Collaboration, CERN/LHCC, 2006, CERN, Geneve, 2006-021, 641 p.

**CMS Physics Technical design report, Volume I : Detector Performance and Software**

The CMS Collaboration (G.L. Bayatian *et al.*), CERN-LHCC-2006-001, CMS-TDR-008-1, 2006. 521pp.

## **5.3 Proceedings**

**Development of the data acquisition system of a large TPC for the ILC**

G. De Lentdecker, E. Verhagen,, Y. Yang, V. Hedberg, L. Jönsson, B. Lundberg, U. Mjörnmark, A. Oskarsson, L. Österman, E. Stenlund  
Proceedings of the 18<sup>th</sup> Real Time Conference IEEE/RT 2012, Berkley, USA, June 11-15, 2012.

**A Large TPC Prototype for a ILC detector**

G. De Lentdecker,  
Proceedings of the IEEE/NSS 2009 Conference, Orlando, USA, October 2009.

**Data Acquisition System for a Large TPC**

G. De Lentdecker,  
Proceedings of the IEEE/NSS 2008 Conference, Octobre 2008, Dresden, Allemagne

## **5.4 Internal Notes**

**Search for High-Mass Resonances Decaying to Electron Pairs in the CMS Experiment**

B. Clerbaux, D. Cockerill, G. De Lentdecker, V. Dero, Sh. Elgammal, A. Gay, S. Harper, T. Hreus, G. Kukartsev, Ph. Mine, E. Olaiya, D. Petyt, C. Shepherd-Themistocleous, V. Timciuc, L. Thomas, P. Vanlaer, CMS AN-2011/159, 35p.

**High  $p_t$  Electron selection efficiency measurement with Tag and Probe method**

L. Thomas, B. Clerbaux, G. De Lentdecker, CMS AN-2011/117, 15 p.

**Search for High-Mass Resonances Decaying to Electron Pairs in the CMS Experiment**

O. Charaf, B. Clerbaux, V. Dero, A. Gay, G. De Lentdecker, Sh. Elgammal, A. Gay, S. Harper, J. Jackson, P. Marage, Ph. Miné, D. Newbold, E. Olaiya, C. Shepherd-Themistocleous, L. Thomas, V. Timciuc, P. Vanlaer, CMS AN-2010/318, 37 p.

**Search for High mass resonances decaying into an électron pair in CMS at 10 TeV with 100 pb<sup>-1</sup>**

O. Charaf, B. Clerbaux, G. De Lentdecker, V. Dero, Sh. Elgammal, P. Marage, M. Mozer, P. Vanlaer Ph. Miné, S. Harper, E. Olaiya, C. Shepherd-Themistocleous D. Evans, C. Hill, J. Jackson, D. Newbold, CMS AN-2009/097, 27 p.

**Validation of ECAL calibration at high energy and correction for electronics saturation**

Sh. Elgammal, B. Clerbaux, G. De Lentdecker, P. Marage, CMS AN-2009/049, 18 p.

**Commissioning the CMS Silicon Strip Tracker prior to Operations with Cosmic Ray Muons**

S. Assouak et al., CMS NOTE-2009/021, 18 p.

**Reception Test of Petals for the End Cap TEC + of the Silicon Strip Tracker**

R. Bremer et al., CMS NOTE-2009/005, 22 p.

**Track Reconstruction with Cosmic Ray Data at the Tracker Integration Facility**

W. Adam et al., CMS NOTE-2009/003, 36 p.

**Integration of the End Cap TEC+ of the CMS Silicon Strip Tracker**

V. Adler et al., CMS NOTE-2009/009, 57 p.

**CMS Tracker Alignment at the Integration Facility**

W. Adam et al., CMS NOTE-2009/002, 38 p.

**A General Purpose Electronic readout system for tests of Time Projection Chambers equipped with different avalanche multiplication systems**

A. Oskarsson et al., Eudet Memo, 2008, 49, 19 p

**Status of the Data Acquisition System and Slow Control for the JRA2 TPC test beam infrastructure**

G. De Lentdecker et al., Eudet Memo, 2008, 25, 7 p

**A trigger distributor box for the LP-TPC**

G. De Lentdecker, J-P. Dewulf, X. Janssen and Y. Yang, Eudet Memo, 2008, 18, 10 p

**A prototype readout system for the LCTPC**

G. De Lentdecker, J-P. Dewulf, X. Janssen, C. Vander Velde, P. Marage, L. Musa, L. Jonsson, B. Lundberg, U. Mjornmark, A. Oskarsson, E. Stenlund and L. Osterman, Eudet Memo, 2008, 06, 13 p

**Petal integration for the CMS tracker end caps**

T. Bergauer et al., CERN-CMS-NOTE-2008-028.

**Silicon Strip Tracker Detector Performance with Cosmic Ray Data at the Tracker Integration Facility**

W. Adam. et al., The CMS Tracker End Caps Collaboration, 2008, CERN, CMS Note, 2008/032, 44 p

**High level triggers for High energy electrons at low luminosity**

D. Evans et al., CMS AN-2008/101, 24 p.

**The High Energy Electron Pair Analysis: An Experience of Integration and Improvements**

M. Mozer, O. Charaf, B. Clerbaux, G. De Lentdecker, V. Dero, S. Elgammal, P. Marage, P. Vanlaer 2008, CERN, CMS AN-2008/077, 18 p

**Search for high mass resonance production decaying into an electron pair in the CMS experiment**

D. Evans et al., for the HEEP Group, 2008, CERN, CMS AN-2008/048, 44 p

**Recovery of high  $p_t$  electrons from large mass pairs,  $\gamma\gamma$  lost in CMS ECAL cracks and in case of a missing endcap** Sh. Elgammal, B. Clerbaux, G. De Lentdecker, P. Marage 2008, CERN, CMS AN-2008/029, 24 p

**Search for massive resonance production decaying into an electron or a photon pair**

J.Brooke, D.Evans, C.Hill, J.Jackson, D.Newbold, O.Charaf, B.Clerbaux, G.DeLentdecker, Sh.Elammal, P.Marage, M.Mozer, P.Vanlaer, V.Litvin, T.Orimoto, A.Askew, E.Carrera, Y.Gershtein, W.Emam, A.Karneyeu, Ph.Mine, N.Adam, V.Halyo, J.Werner, S.Harper, C.Shepherd-Themistocleous, R.Walton, 2008, CERN, CMS AN-2008/004, 53 p

**CMS Computing, Software and Analysis Challenge in 2006 (CSA2006) Summary**

D. Acosta et al., 2007, Collaboration CMS, CERN CMS-NOTE (with internal referee), 2007/006, 106 p.

**The CMS Magnet Test and Cosmic Challenge (MTCC Phase I and II, Operational experience and Lessons learnt**

D. Acosta et al., 2007, Collaboration CMS, CERN CMS-NOTE (with internal referee), 2007/005, 36 p.

**HEEP (High Energy Electrons and Photons) Strategy Toward First CMS Data**

J. Brooke, D. Evans, C. Hill, J. Jackson, D. Newbold, O. Charaf, B. Clerbaux, G. De Lentdecker, Sh. Elgammal, P. Marage, M. Mozer, P. Vanlaer, V. Litvin, T. Orimoto, E. Carrera, Y. Gershtein, A. Karneyeu, Ph. Mine, P. Nedelec, J. Cole, B. Kennedy, C. Shepherd-Themistocleous, R. Walton, S. Worm, P. Meridiani, A. Palma, R. Paramatti, C. Rovelli, N. Godinovic, I. Puljak, D. Polic, Z. Antunovic 2007, Collaboration CMS, CERN, IN2007/028, 14 p.

**CSA06 Analysis Exercise of the SUSY/BSM High Energy Electron Pair working group**

D. Evans, C. Shepherd-Themistocleous, P. Vanlaer, G. De Lentdecker, S. De Weirtdt 2007, Collaboration CMS, CERN, IN2007/019, 10

**HEEP (High Energy Electrons and Photons) strategy toward first CMS data**

J. Brooke et al., for the HEEP Group 2007, CERN, CMS IN-2007/064, 27 p.

**Search for massive resonance production decaying into an electron or a photon pair**

J. Brooke et al., for the HEEP Group 2007, CERN, CMS AN-2007/045, 30 p

**HEEP (High Energy Electrons and Photons) Strategy Toward First CMS Data**

J. Brooke, D. Evans, C. Hill, J. Jackson, D. Newbold, O. Charaf, B. Clerbaux, G. De Lentdecker, Sh. Elgammal, P. Marage, M. Mozer, P. Vanlaer, V. Litvin, T. Orimoto, E. Carrera, Y. Gershtein, A. Karneyeu, Ph. Mine, P. Nedelec, J. Cole, B. Kennedy, C. Shepherd-Themistocleous, R. Walton, S. Worm, P. Meridiani, A. Palma, R. Paramatti, C. Rovelli, N. Godinovic, I. Puljak, D. Polic, Z. Antunovic 2007, CERN, CMS IN-2007/028, 14 p.

**A Measurement of the Z Forward-Backward Charge Asymmetry with 1 fb<sup>-1</sup>**

G. De Lentdecker, J. Lee, and K. McFarland  
2006, Fermilab, CDF/ANAL/ELECTROWEAK/PUBLIC/8458, 35 p.

**A Measurement of Z Forward-Backward Asymmetry with 364 pb<sup>-1</sup> of CDF Run II Data**

G. De Lentdecker, J. Lee, and K. McFarland 2006, Fermilab,  
CDF/PUB/ELECTROWEAK/PUBLIC/8398, 9 p.

**Measurement of the Forward Backward Charge Asymmetry of di-electron pairs using the electron polar angle distribution**

G. De Lentdecker, J. Lee, and K. McFarland  
2006, Fermilab, CDF/ANAL/ELECTROWEAK/PUBLIC/8214, 17 p.

