Theodoros Christoudias

Curriculum Vitæ

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Education

2005–2009 **PhD Physics**, *Imperial College*, *London*, *UK*.
Thesis: "Search for the Standard Model Higgs Boson in the Missing Energy Topology"
Supervisor: Prof Gavin J. Davies

2002–2005 **BSc Physics**, *Imperial College*, *London*, *UK*.
1st Class Honours

Professional Experience

2014– **Assistant Professor**, *Cyprus Institute*, *Nicosia*, *Cyprus*.

2012–2014 **Associate Research Scientist**, *Cyprus Institute*, *Nicosia*, *Cyprus*.

2010–2012 **Computational Scientist**, *Cyprus Institute*, *Nicosia*, *Cyprus*.

2006–2009 **DØ Collaboration**, *Fermi National Accelerator Laboratory* , *USA*.
Higgs Group; High-Level Trigger; Data Acquisition Expert; Emergency Warden

Fellowships & Grants

2006–2009 Fermilab International Fellowship

2005 A.G. Leventis Foundation Grant

2004 Imperial College UROP

Associations & Memberships

2005– Associate, Royal College of Science, UK

2005– Associate Member, Institute of Physics, UK

2012– Member, European Geosciences Union (EGU)

2014– Member, American Geophysical Union (AGU)

Research Interests

- Earth System Modelling
- Air Quality Modelling
- High Performance Computing (HPC)

Teaching

Courses

2019–2020	Atmospheric Modelling (Environmental Sciences MSc, 10 ECTS)
2017–2020	Visualisation and Advanced Data Structures (Simulation and Data Science MSc, 10 ECTS)
2016	Frontiers in High-Performance Computing & Scientific Visualization (Marie Skłodowska-Curie European Joint Doctorates,10 ECTS)
2015	High Performance Visualization for Large-Scale Scientific Data Analytics (NCSA Blue Waters Graduate Course)
2014	Data Structures (Cyprus Institute Graduate School, 10 ECTS)

Schools

Spring 2017	PRACE 2017 Spring School with VI-SEEM
Summer 2016	International HPC Summer School on Challenges in Computational Sciences Mentor
Winter 2016	HPC architectures and numerical methods, HPC-LEAP European Joint Doctorates
Fall 2015	HPC and large-scale numerical computation, HPC-LEAP European Joint Doctorates

Workshops

December 2013	Advanced Scientific Visualization, CYI VisLab & NCSA Advanced Visualisation Lab

Service

Peer Review Activities

- Atmospheric Chemistry and Physics (ACP)
- Geoscientific Model Development (GMD)
- Atmospheric Environment
- Science of the Total Environment
- Atmospheric Pollution Research
- Aerosol and Air Quality Research
- Environment International Journal
- Remote Sensing Applications: Society and Environment (RSASE)
- Environmental Science & Technology
- Journal of Environmental Radioactivity
- Urban Science

Editorial Board Membership

- Climate (2018–)
- Atmosphere (2020–)

Ad Hoc Review of Proposals

- French State “Investissements d’Avenir” Research Grants
- National Natural Science Foundation of China (NSFC) / Hong Kong Research Grant Council (RGC) Joint Research Scheme
- Hungarian National Research, Development and Innovation Office (NKFIH)
- Science Fund of the Republic of Serbia PROMIS programme

Journal Publications

1. George K Georgiou et al. “Air quality modelling over the Eastern Mediterranean: Seasonal sensitivity to anthropogenic emissions”. In: *Atmospheric Environment* 222 (2020), p. 117119. DOI: 10.1016/j.atmosenv.2019.117119.

2. Vassiliki Kotroni et al. “DISARM Early Warning System for Wildfires in the Eastern Mediterranean”. In: *Sustainability* 12.16 (2020), p. 6670.

3. Michail Alvanos and Theodoros Christoudias. “Accelerating Atmospheric Chemical Kinetics for Climate Simulations”. In: *IEEE Transactions on Parallel and Distributed Systems* (2019). DOI: 10.1109/TPDS.2019.2918798.

4. Jonilda Kushta et al. “Evaluation of EU air quality standards through modeling and the FAIRMODE benchmarking methodology”. In: *Air Quality, Atmosphere & Health* 12.1 (2019), pp. 73–86.

5. Alexander De Meij, George Zittis, and Theodoros Christoudias. “On the uncertainties introduced by land cover data in high-resolution regional simulations”. In: *Meteorology and Atmospheric Physics* (2018), pp. 1–11.

6. George K Georgiou et al. “Air quality modelling in the summer over the eastern Mediterranean using WRF-Chem: chemistry and aerosol mechanism intercomparison”. In: *Atmospheric Chemistry and Physics* 18.3 (2018), pp. 1555–1571. DOI: 10.5194/acp-18-1555-2018.

7. M Alvanos and T Christoudias. “GPU-accelerated atmospheric chemical kinetics in the ECHAM/MESSy (EMAC) Earth system model (version 2.52)”. In: *Geoscientific Model Development* 10.10 (2017), p. 3679. DOI: 10.5194/gmd-10-3679-2017.

8. M Alvanos and T Christoudias. “MEDINA: MECCA Development in Accelerators-KPP Fortran to CUDA source-to-source Preprocessor”. In: *Journal of Open Research Software* 5.1 (2017).

9. J Kushta et al. “Modelling study of the atmospheric composition over Cyprus”. In: *Atmospheric Pollution Research* (2017).

10. Sara Bacer, T Christoudias, and Andrea Pozzer. “Projection of North Atlantic Oscillation and its effect on tracer transport”. In: *Atmospheric Chemistry and Physics* 16.24 (2016), pp. 15581–15592. DOI: 10.5194/acp-16-15581-2016.

11. Michalis Christou et al. “Earth system modelling on system-level heterogeneous architectures: EMAC (version 2.42) on the Dynamical Exascale Entry Platform (DEEP)”. In: *Geoscientific Model Development* 9.9 (2016), p. 3483. DOI: 10.5194/gmd-9-3483-2016.

12. NI Kristiansen et al. “Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models”. In: *Atmospheric Chemistry and Physics* 16.5 (2016), pp. 3525–3561. DOI: 10.5194/acp-16-3525-2016.

13. T Christoudias, Y Proestos, and J Lelieveld. “Atmospheric Dispersion of Radioactivity from Nuclear Power Plant Accidents: Global Assessment and Case Study for the Eastern Mediterranean and Middle East”. In: *Energies* 7.12 (2014), pp. 8338–8354.

14. T Christoudias, Y Proestos, and J Lelieveld. “Global risk from the atmospheric dispersion of radionuclides by nuclear power plant accidents in the coming decades”. In: *Atmospheric Chemistry and Physics* 14.9 (2014), pp. 4607–4616. DOI: 10.5194/acp-14-4607-2014.

15. T Christoudias and J Lelieveld. “Modelling the global atmospheric transport and deposition of radionuclides from the Fukushima Dai-ichi nuclear accident”. In: *Atmospheric Chemistry and Physics* 13.3 (2013), pp. 1425–1438. DOI: 10.5194/acp-13-1425-2013.

16. T Christoudias, A Pozzer, and J Lelieveld. “Influence of the North Atlantic Oscillation on air pollution transport”. In: *Atmospheric Chemistry and Physics* 12.2 (2012), pp. 869–877. DOI: 10.5194/acp-12-869-2012.

17. VM Abazov et al. "A measurement of the ratio of inclusive cross sections $\sigma(p\bar{p} \to Z + bjet)/\sigma(p\bar{p} \to Z + jet)$ at $\sqrt{s}$=1.96 TeV". In: *Phys. Rev.* D83 (2011), p. 031105. DOI: 10.1103/PhysRevD.83.031105. arXiv: 1010.6203 [hep-ex].

18. VM Abazov et al. "Azimuthal decorrelations and multiple parton interactions in γ+2 jet and γ+3 jet events in $p\bar{p}$ collisions at $\sqrt{s}$=1.96 TeV". In: *Phys. Rev.* D83 (2011), p. 052008. DOI: 10.1103/PhysRevD.83.052008. arXiv: 1101.1509 [hep-ex].

19. VM Abazov et al. "Determination of the width of the top quark". In: *Phys. Rev. Lett.* 106 (2011), p. 022001. DOI: 10.1103/PhysRevLett.106.022001. arXiv: 1009.5686 [hep-ex].

20. VM Abazov et al. "High mass exclusive diffractive dijet production in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV". In: *Phys. Lett.* B705 (2011), pp. 193–199. DOI: 10.1016/j.physletb.2011.10.013. arXiv: 1009.2444 [hep-ex].

21. VM Abazov et al. "Measurement of color flow in $t\bar{t}$ events from $p\bar{p}$ collisions at $\sqrt{s}$=1.96 TeV". In: *Phys. Rev.* D83 (2011), p. 092002. DOI: 10.1103/PhysRevD.83.092002. arXiv: 1101.0648 [hep-ex].

22. VM Abazov et al. "Measurement of spin correlation in $t\bar{t}$ production using dilepton final states". In: *Phys. Lett.* B702 (2011), pp. 16–23. DOI: 10.1016/j.physletb.2011.05.077. arXiv: 1103.1871 [hep-ex].

23. VM Abazov et al. "Measurement of the $WZ \to \ell\nu\ell\ell$ cross section and limits on anomalous triple gauge couplings in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV". In: *Phys. Lett.* B695 (2011), pp. 67–73. DOI: 10.1016/j.physletb.2010.10.047. arXiv: 1006.0761 [hep-ex].

24. VM Abazov et al. "Measurement of the top quark pair production cross section in the lepton+jets channel in proton-antiproton collisions at $\sqrt{s}$=1.96 TeV". In: *Phys. Rev.* D84 (2011), p. 012008. DOI: 10.1103/PhysRevD.84.012008. arXiv: 1101.0124 [hep-ex].

25. VM Abazov et al. "Measurement of the W boson helicity in top quark decays using 5.4 fb^{-1} of $p\bar{p}$ collision data". In: *Phys. Rev.* D83 (2011), p. 032009. DOI: 10.1103/PhysRevD.83.032009. arXiv: 1011.6549 [hep-ex].

26. VM Abazov et al. "Precise study of the Z/γ^* boson transverse momentum distribution in $p\bar{p}$ collisions using a novel technique". In: *Phys. Rev. Lett.* 106 (2011), p. 122001. DOI: 10.1103/PhysRevLett.106.122001. arXiv: 1010.0262 [hep-ex].

27. VM Abazov et al. "Search for $W' \to tb$ resonances with left- and right-handed couplings to fermions". In: *Phys. Lett.* B699 (2011), pp. 145–150. DOI: 10.1016/j.physletb.2011.03.066. arXiv: 1101.0806 [hep-ex].

28. VM Abazov et al. "Search for WH associated production in 5.3 fb^{-1} of $p\bar{p}$ collisions at the Fermilab Tevatron". In: *Phys. Lett.* B698 (2011), pp. 6–13. DOI: 10.1016/j.physletb.2011.02.036. arXiv: 1012.0874 [hep-ex].

29. VM Abazov et al. "Search for a heavy neutral gauge boson in the dielectron channel with 5.4 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{(s)}$ = 1.96 TeV". In: *Phys. Lett.* B695 (2011), pp. 88–94. DOI: 10.1016/j.physletb.2010.10.059. arXiv: 1008.2023 [hep-ex].

30. VM Abazov et al. "Search for flavor changing neutral currents in decays of top quarks". In: *Phys. Lett.* B701 (2011), pp. 313–320. DOI: 10.1016/j.physletb.2011.06.014. arXiv: 1103.4574 [hep-ex].

31. VM Abazov et al. "Search for neutral Higgs bosons in the multi-b-jet topology in 5.2fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Lett.* B698 (2011), pp. 97–104. DOI: 10.1016/j.physletb.2011.02.062. arXiv: 1011.1931 [hep-ex].

32. VM Abazov et al. "Search for pair production of the scalar top quark in the electron+muon final state". In: *Phys. Lett.* B696 (2011), pp. 321–327. DOI: 10.1016/j.physletb.2010.12.052. arXiv: 1009.5950 [hep-ex].

33. VM Abazov et al. “Search for resonant WW and WZ production in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV”. In: *Phys. Rev. Lett.* 107 (2011), p. 011801. DOI: 10.1103/PhysRevLett.107.011801. arXiv: 1011.6278 [hep-ex].

34. VM Abazov et al. “Search for single vector-like quarks in $p\bar{p}$ collisions at $\sqrt{(s)}$ = 1.96 TeV”. In: *Phys. Rev. Lett.* 106 (2011), p. 081801. DOI: 10.1103/PhysRevLett.106.081801. arXiv: 1010.1466 [hep-ex].

35. VM Abazov et al. “Search for the Standard Model Higgs Boson in the $H \to WW \to \ell\nu q'\bar{q}$ Decay Channel”. In: *Phys. Rev. Lett.* 106 (2011), p. 171802. DOI: 10.1103/PhysRevLett.106.171802. arXiv: 1101.6079 [hep-ex].

36. T Aaltonen et al. “Combination of Tevatron searches for the standard model Higgs boson in the W+W- decay mode”. In: *Phys. Rev. Lett.* 104 (2010), p. 061802. DOI: 10.1103/PhysRevLett.104.061802. arXiv: 1001.4162 [hep-ex].

37. T Aaltonen et al. “Combined Tevatron upper limit on $gg \to H \to W^+W^-$ and constraints on the Higgs boson mass in fourth-generation fermion models”. In: *Phys. Rev.* D82 (2010), p. 011102. DOI: 10.1103/PhysRevD.82.011102. arXiv: 1005.3216 [hep-ex].

38. VM Abazov et al. “b-Jet Identification in the D0 Experiment”. In: *Nucl. Instrum. Meth.* A620 (2010), pp. 490–517. DOI: 10.1016/j.nima.2010.03.118. arXiv: 1002.4224 [hep-ex].

39. VM Abazov et al. “Dependence of the $t\bar{t}$ production cross section on the transverse momentum of the top quark”. In: *Phys. Lett.* B693 (2010), pp. 515–521. DOI: 10.1016/j.physletb.2010.09.011. arXiv: 1001.1900 [hep-ex].

40. VM Abazov et al. “Double parton interactions in γ+3 jet events in pp^- bar collisions $\sqrt{s} = 1.96$ TeV”. In: *Phys. Rev.* D81 (2010), p. 052012. DOI: 10.1103/PhysRevD.81.052012. arXiv: 0912.5104 [hep-ex].

41. VM Abazov et al. “Evidence for an anomalous like-sign dimuon charge asymmetry”. In: *Phys. Rev. Lett.* 105 (2010), p. 081801. DOI: 10.1103/PhysRevLett.105.081801. arXiv: 1007.0395 [hep-ex].

42. VM Abazov et al. “Evidence for an anomalous like-sign dimuon charge asymmetry”. In: *Phys. Rev.* D82 (2010), p. 032001. DOI: 10.1103/PhysRevD.82.032001. arXiv: 1005.2757 [hep-ex].

43. VM Abazov et al. “Measurement of $t\bar{t}$ production in the tau + jets topology using $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV”. In: *Phys. Rev.* D82 (2010), p. 071102. DOI: 10.1103/PhysRevD.82.071102. arXiv: 1008.4284 [hep-ex].

44. VM Abazov et al. “Measurement of direct photon pair production cross sections in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV”. In: *Phys. Lett.* B690 (2010), pp. 108–117. DOI: 10.1016/j.physletb.2010.05.017. arXiv: 1002.4917 [hep-ex].

45. VM Abazov et al. “Measurement of the $t\bar{t}$ cross section using high-multiplicity jet events”. In: *Phys. Rev.* D82 (2010), p. 032002. DOI: 10.1103/PhysRevD.82.032002. arXiv: 0911.4286 [hep-ex].

46. VM Abazov et al. “Measurement of the dijet invariant mass cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV”. In: *Phys. Lett.* B693 (2010), pp. 531–538. DOI: 10.1016/j.physletb.2010.09.013. arXiv: 1002.4594 [hep-ex].

47. VM Abazov et al. “Measurement of the normalized $Z/\gamma^* -> \mu^+\mu^-$ transverse momentum distribution in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV”. In: *Phys. Lett.* B693 (2010), pp. 522–530. DOI: 10.1016/j.physletb.2010.09.012. arXiv: 1006.0618 [hep-ex].

48. VM Abazov et al. “Measurement of the t-channel single top quark production cross section”. In: *Phys. Lett.* B682 (2010), pp. 363–369. DOI: 10.1016/j.physletb.2009.11.038. arXiv: 0907.4259 [hep-ex].

49. VM Abazov et al. “Measurement of Z/gamma*+jet+X angular distributions in p anti-p collisions at $s^{1/2}$ = 1.96.TeV”. In: *Phys. Lett.* B682 (2010), pp. 370–380. DOI: 10.1016/j.physletb.2009.11.012. arXiv: 0907.4286 [hep-ex].

50. VM Abazov et al. "Search for $ZH \to \ell^+\ell^- b\bar{b}$ production in 4.2 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Rev. Lett.* 105 (2010), p. 251801. DOI: 10.1103/PhysRevLett.105.251801. arXiv: 1008.3564 [hep-ex].

51. VM Abazov et al. "Search for a resonance decaying into WZ boson pairs in $p\bar{p}$ collisions". In: *Phys. Rev. Lett.* 104 (2010), p. 061801. DOI: 10.1103/PhysRevLett.104.061801. arXiv: 0912.0715 [hep-ex].

52. VM Abazov et al. "Search for CP violation in $B_s^0 \to \mu^+ D_s^- X$ decays in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Rev.* D82 (2010). [Erratum: Phys. Rev.D83,119901(2011)], p. 012003. DOI: 10.1103/PhysRevD.82.012003, 10.1103/PhysRevD.83.119901. arXiv: 0904.3907 [hep-ex].

53. VM Abazov et al. "Search for diphoton events with large missing transverse energy in 6.3 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Rev. Lett.* 105 (2010), p. 221802. DOI: 10.1103/PhysRevLett.105.221802. arXiv: 1008.2133 [hep-ex].

54. VM Abazov et al. "Search for events with leptonic jets and missing transverse energy in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Rev. Lett.* 105 (2010), p. 211802. DOI: 10.1103/PhysRevLett.105.211802. arXiv: 1008.3356 [hep-ex].

55. VM Abazov et al. "Search for flavor changing neutral currents via quark-gluon couplings in single top quark production using 2.3 fb^{-1} of $p\bar{p}$ collisions". In: *Phys. Lett.* B693 (2010), pp. 81–87. DOI: 10.1016/j.physletb.2010.08.011. arXiv: 1006.3575 [hep-ex].

56. VM Abazov et al. "Search for Higgs boson production in dilepton and missing energy final states with 5.4 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV". In: *Phys. Rev. Lett.* 104 (2010), p. 061804. DOI: 10.1103/PhysRevLett.104.061804. arXiv: 1001.4481 [hep-ex].

57. VM Abazov et al. "Search for New Fermions ('Quirks') at the Fermilab Tevatron Collider". In: *Phys. Rev. Lett.* 105 (2010), p. 211803. DOI: 10.1103/PhysRevLett.105.211803. arXiv: 1008.3547 [hep-ex].

58. VM Abazov et al. "Search for Randall-Sundrum gravitons in the dielectron and diphoton final states with 5.4 fb-1 of data from $p\bar{p}$ collisions at sqrt(s)=1.96 TeV". In: *Phys. Rev. Lett.* 104 (2010), p. 241802. DOI: 10.1103/PhysRevLett.104.241802. arXiv: 1004.1826 [hep-ex].

59. VM Abazov et al. "Search for scalar bottom quarks and third-generation leptoquarks in pp^- bar collisions at $\sqrt{s}$=1.96 TeV". In: *Phys. Lett.* B693 (2010), pp. 95–101. DOI: 10.1016/j.physletb.2010.08.028. arXiv: 1005.2222 [hep-ex].

60. VM Abazov et al. "Search for single top quarks in the tau+jets channel using 4.8 fb^{-1} of p p-bar collision data". In: *Phys. Lett.* B690 (2010), pp. 5–14. DOI: 10.1016/j.physletb.2010.05.003. arXiv: 0912.1066 [hep-ex].

61. VM Abazov et al. "Search for sneutrino production in emu final states in 5.3 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s}$ =1.96 TeV". In: *Phys. Rev. Lett.* 105 (2010), p. 191802. DOI: 10.1103/PhysRevLett.105.191802. arXiv: 1007.4835 [hep-ex].

62. VM Abazov et al. "Search for the associated production of a b quark and a neutral supersymmetric Higgs boson which decays to tau pairs". In: *Phys. Rev. Lett.* 104 (2010), p. 151801. DOI: 10.1103/PhysRevLett.104.151801. arXiv: 0912.0968 [hep-ex].

63. VM Abazov et al. "Search for the rare decay $B_s^0 \to \mu^+\mu^-$". In: *Phys. Lett.* B693 (2010), pp. 539–544. DOI: 10.1016/j.physletb.2010.09.024. arXiv: 1006.3469 [hep-ex].

64. VM Abazov et al. "Search for the standard model Higgs boson in the ZH —> v v-bar b b-bar channel in 5.2 fb^{-1} of p p-bar collisions at s$^{1/2}$ = 1.96 TeV". In: *Phys. Rev. Lett.* 104 (2010), p. 071801. DOI: 10.1103/PhysRevLett.104.071801. arXiv: 0912.5285 [hep-ex].

65. VM Abazov et al. "A Novel method for modeling the recoil in W boson events at hadron collider". In: *Nucl. Instrum. Meth.* A609 (2009), pp. 250–262. DOI: 10.1016/j.nima.2009.08.056. arXiv: 0907.3713 [hep-ex].

66. VM Abazov et al. "A Search for associated W and Higgs Boson production in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96-TeV". In: *Phys. Rev. Lett.* 102 (2009), p. 051803. DOI: 10.1103/PhysRevLett.102.051803. arXiv: 0808.1970 [hep-ex].

67. VM Abazov et al. "Combination of t anti-t cross section measurements and constraints on the mass of the top quark and its decays into charged Higgs bosons". In: *Phys. Rev.* D80 (2009), p. 071102. DOI: 10.1103/PhysRevD.80.071102. arXiv: 0903.5525 [hep-ex].

68. VM Abazov et al. "Combined measurements of anomalous charged trilinear gauge-boson couplings from diboson production in p anti-p collisions at $s^{1/2}$ =1.96 TeV". In: (2009). arXiv: 0907.4952 [hep-ex].

69. VM Abazov et al. "Determination of the strong coupling constant from the inclusive jet cross section in $p\bar{p}$ collisions at sqrt(s)=1.96 TeV". In: *Phys. Rev.* D80 (2009), p. 111107. DOI: 10.1103/PhysRevD.80.111107. arXiv: 0911.2710 [hep-ex].

70. VM Abazov et al. "Direct measurement of the mass difference between top and anti-top quarks". In: *Phys. Rev. Lett.* 103 (2009), p. 132001. DOI: 10.1103/PhysRevLett.103.132001. arXiv: 0906.1172 [hep-ex].

71. VM Abazov et al. "Direct measurement of the W boson width". In: *Phys. Rev. Lett.* 103 (2009), p. 231802. DOI: 10.1103/PhysRevLett.103.231802. arXiv: 0909.4814 [hep-ex].

72. VM Abazov et al. "Evidence for decay $B_s^0 \to D_s^{(*)} D_s^{(*)}$ and a measurement of $\Delta\Gamma_s^{CP}/\Gamma_s$". In: *Phys. Rev. Lett.* 102 (2009), p. 091801. DOI: 10.1103/PhysRevLett.102.091801. arXiv: 0811.2173 [hep-ex].

73. VM Abazov et al. "Evidence of $WW + WZ$ production with lepton + jets final states in proton-antiproton collisions at $\sqrt{s}$ =1.96 TeV". In: *Phys. Rev. Lett.* 102 (2009), p. 161801. DOI: 10.1103/PhysRevLett.102.161801. arXiv: 0810.3873 [hep-ex].

74. VM Abazov et al. "Measurement of $\sigma(p\bar{p} \to Z + X)$ Br($Z \to \tau^+\tau^-$) at $\sqrt{s}$ = 1.96-TeV". In: *Phys. Lett.* B670 (2009), pp. 292–299. DOI: 10.1016/j.physletb.2008.11.010. arXiv: 0808.1306 [hep-ex].

75. VM Abazov et al. "Measurement of dijet angular distributions at $s^{1/2}$ = 1.96 TeV and searches for quark compositeness and extra spatial dimensions". In: *Phys. Rev. Lett.* 103 (2009), p. 191803. DOI: 10.1103/PhysRevLett.103.191803. arXiv: 0906.4819 [hep-ex].

76. VM Abazov et al. "Measurement of gamma + b + X and gamma + c + X production cross sections in p anti-p collisions at s**(1/2) = 1.96-TeV". In: *Phys. Rev. Lett.* 102 (2009), p. 192002. DOI: 10.1103/PhysRevLett.102.192002. arXiv: 0901.0739 [hep-ex].

77. VM Abazov et al. "Measurement of the B_s^0 semileptonic branching ratio to an orbitally excited D_s state, Br($B_s^0 \to D_{s1}^-(2536)\mu^+\nu X$)". In: *Phys. Rev. Lett.* 102 (2009), p. 051801. DOI: 10.1103/PhysRevLett.102.051801. arXiv: 0712.3789 [hep-ex].

78. VM Abazov et al. "Measurement of the angular and lifetime parameters of the decays $B_d^0 \to J/\psi K^{*0}$ and $B_s^0 \to J/\psi\phi$". In: *Phys. Rev. Lett.* 102 (2009), p. 032001. DOI: 10.1103/PhysRevLett.102.032001. arXiv: 0810.0037 [hep-ex].

79. VM Abazov et al. "Measurement of the lifetime of the $B_c^\pm$ meson in the semileptonic decay channel". In: *Phys. Rev. Lett.* 102 (2009), p. 092001. DOI: 10.1103/PhysRevLett.102.092001. arXiv: 0805.2614 [hep-ex].

80. VM Abazov et al. "Measurement of the t anti-t production cross section and top quark mass extraction using dilepton events in p anti-p collisions". In: *Phys. Lett.* B679 (2009), pp. 177–185. DOI: 10.1016/j.physletb.2009.07.032. arXiv: 0901.2137 [hep-ex].

81. VM Abazov et al. "Measurement of the Top Quark Mass in Final States with Two Leptons". In: *Phys. Rev.* D80 (2009), p. 092006. DOI: 10.1103/PhysRevD.80.092006. arXiv: 0904.3195 [hep-ex].

82. VM Abazov et al. "Measurement of the W boson mass". In: *Phys. Rev. Lett.* 103 (2009), p. 141801. DOI: 10.1103/PhysRevLett.103.141801. arXiv: 0908.0766 [hep-ex].

83. VM Abazov et al. “Measurement of the WW production cross section with dilepton final states in p anti-p collisions at s**(1/2) = 1.96-TeV and limits on anomalous trilinear gauge couplings”. In: *Phys. Rev. Lett.* 103 (2009), p. 191801. DOI: 10.1103/PhysRevLett.103.191801. arXiv: 0904.0673 [hep-ex].

84. VM Abazov et al. “Measurement of the Z gamma —> nu anti-nu gamma cross section and limits on anomalous Z Z gamma and Z gamma gamma couplings in p anti-p collisions at s**(1/2) = 1.96-TeV”. In: *Phys. Rev. Lett.* 102 (2009), p. 201802. DOI: 10.1103/PhysRevLett.102.201802. arXiv: 0902.2157 [hep-ex].

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