

Dinko Ferenček

Curriculum Vitae

Personal Information

First Name Dinko
Family Name Ferenček
Date of Birth June 11, 1983
Place of Birth Zagreb, Croatia
Citizenship Croatian
Gender Male
Marital Status Married, 1 child

Contact Information

Mailing Address Ruđer Bošković Institute
Bijenička cesta 54
10000 Zagreb, Croatia
Office Wing 2/Room 128C-2
Office Phone +385 1 457 1317
Cell Phone +385 99 8355 495
Homepage <http://cern.ch/ferencek/>
e-mail Dinko.Ferencek@irb.hr

Education

2006–2011 **Ph.D., Physics**, University of Maryland, USA (advisor Prof. Sarah C. Eno)
Dissertation: [Search for Pair Production of First-Generation Scalar Leptoquarks in Proton-Proton Collisions at \$\sqrt{s} = 7\$ TeV](#)
2001–2006 **B.Sc., Physics**, University of Zagreb, Croatia (advisor Prof. Mirko Planinić/co-advisor Dr. Vuko Brigljević)
Diploma thesis: *WZ Boson Production in Proton-Proton Collisions at $\sqrt{s} = 14$ TeV*

Work Experience

November 2015–Present **Research Associate**, Ruđer Bošković Institute, Zagreb, Croatia
CMS Experiment at the CERN Large Hadron Collider
September 2011–October 2015 **Postdoctoral Research Associate**, Rutgers, The State University of New Jersey, USA
CMS Experiment at the CERN Large Hadron Collider
June 2007–August 2011 **Research Assistant**, University of Maryland, USA
CMS Experiment at the CERN Large Hadron Collider
August 2006–May 2007 **Teaching Assistant**, University of Maryland, USA
Physics 121: Fundamentals of Physics I

Publications

As a member of the CMS Collaboration, I am a co-author on more than 600 peer-reviewed articles published in international scientific journals¹. Below is a list of selected CMS publications to which I made significant contributions.

Selected Publications

- 2018 CMS Collaboration, “Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV”, *JINST* **13** (2018) P05011, [arXiv:1712.07158](#)
- 2017 CMS Collaboration, “Search for dijet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter and other models”, *Phys. Lett. B* **769** (2017) 520, [arXiv:1611.03568](#)
- 2016 CMS Collaboration, “Search for narrow resonances in dijet final states at $\sqrt{s} = 8$ TeV with the novel CMS technique of data scouting”, *Phys. Rev. Lett.* **117** (2016) 031802, [arXiv:1604.08907](#)
- 2016 CMS Collaboration, “Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks”, *Eur. Phys. J. C* **76** (2016) 371, [arXiv:1602.08762](#)
- 2015 CMS Collaboration, “Search for narrow resonances decaying to dijets in proton-proton collisions at $\sqrt{s} = 13$ TeV”, *Phys. Rev. Lett.* **116** (2016) 071801, [arXiv:1512.01224](#)
- 2015 CMS Collaboration, “Search for pair-produced vector-like B quarks in pp collisions at $\sqrt{s} = 8$ TeV”, *Phys. Rev. D* **93** (2016) 112009, [arXiv:1507.07129](#)
- 2015 CMS Collaboration, “Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure”, *JHEP* **06** (2015) 080, [arXiv:1503.01952](#)
- 2015 CMS Collaboration, “Search for resonances and quantum black holes using dijet mass spectra in proton-proton collisions at $\sqrt{s} = 8$ TeV”, *Phys. Rev. D* **91** (2015) 052009, [arXiv:1501.04198](#)
- 2014 CMS Collaboration, “Search for pair-produced resonances decaying to jet pairs in proton-proton collisions at $\sqrt{s} = 8$ TeV”, *Phys. Lett. B* **747** (2015) 98, [arXiv:1412.7706](#)
- 2013 CMS Collaboration, “Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at $\sqrt{s} = 7$ TeV”, *JHEP* **01** (2013) 013, [arXiv:1210.2387](#)
- 2011 CMS Collaboration, “Search for First Generation Scalar Leptoquarks in the $evjj$ Channel in pp Collisions at $\sqrt{s} = 7$ TeV”, *Phys. Lett. B* **703** (2011) 246, [arXiv:1105.5237](#)
- 2011 CMS Collaboration, “Missing transverse energy performance of the CMS detector”, *JINST* **6** (2011) 09001, [arXiv:1106.5048](#)
- 2011 CMS Collaboration, “Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV”, *Phys. Rev. Lett.* **106** (2011) 201802, [arXiv:1012.4031](#)
- 2007 V. Brigljević et. al., “Study of di-boson production with the CMS detector at LHC”, *J. Phys. G* **34** (2007) N269-N295

¹Source: INSPIRE-HEP literature database <https://inspirehep.net>

CMS Public Documents²

- 2016 CMS Collaboration, “Searches for narrow resonances decaying to dijets in pp collisions at $\sqrt{s} = 13$ TeV using 12.9 fb^{-1} ”, *CMS Physics Analysis Summary* **EXO-16-032**
- 2016 CMS Collaboration, “Identification of double-b quark jets in boosted event topologies”, *CMS Physics Analysis Summary* **BTV-15-002**
- 2016 CMS Collaboration, “Identification of b quark jets at the CMS Experiment in the LHC Run 2”, *CMS Physics Analysis Summary* **BTV-15-001**
- 2015 CMS Collaboration, “Search for Narrow Resonances using the Dijet Mass Spectrum with 42 pb^{-1} of pp Collisions at $\sqrt{s} = 13$ TeV”, *CMS Physics Analysis Summary* **EXO-15-001**
- 2015 CMS Collaboration, “First Results from Dijet Resonance Search using 37 pb^{-1} of proton-proton collisions at $\sqrt{s} = 13$ TeV”, *CMS Detector Performance Summary* **DP-2015-017**
- 2013 CMS Collaboration, “Search for pair-produced vector-like quarks of charge $-1/3$ in lepton+jets final state in pp collisions at $\sqrt{s} = 8$ TeV”, *CMS Physics Analysis Summary* **B2G-12-019**
- 2013 CMS Collaboration, “Performance of b tagging at $\sqrt{s} = 8$ TeV in multijet, $t\bar{t}$ and boosted topology events”, *CMS Physics Analysis Summary* **BTV-13-001**
- 2013 CMS Collaboration, “Search for Heavy Resonances Decaying into $b\bar{b}$ and bg Final States in pp Collisions at $\sqrt{s} = 8$ TeV”, *CMS Physics Analysis Summary* **EXO-12-023**
- 2012 CMS Collaboration, “Search for b-jet Resonances in pp Collisions at $\sqrt{s} = 7$ TeV”, *CMS Physics Analysis Summary* **EXO-11-008**
- 2010 CMS Collaboration, “Performance of Missing Transverse Energy Reconstruction in $\sqrt{s} = 900$ and 2360 GeV pp Collision Data”, *CMS Physics Analysis Summary* **JME-10-002**
- 2009 CMS Collaboration, “Offset Energy Correction for Cone Jets”, *CMS Physics Analysis Summary* **JME-09-003**

International Collaborations

- 2005–Present CMS Collaboration at CERN
2016–Present RD50 Collaboration at CERN

Memberships in Professional Associations

- April 2016–Present Croatian Physical Society
February American Physical Society
2011–April 2016

Organization of International Conferences and Workshops

- 2018 Member of the Organizing Committee for the LHC Days in Split 2018 conference
2018 Member of the CMS Organizing Committee for the CMS Heavy Flavour Tagging Workshop 2018

²Internally reviewed but not published in journals. Available at <http://cdsweb.cern.ch/collection/CMS>

Talks, Seminars, and Posters

- April 13, 2018 “Status of the double-b tagger”, CMS Heavy Flavour Tagging Workshop 2018, Brussels, Belgium
- October 13, 2017 “Search for Heavy Resonance and Dark Matter Using Jets at the LHC”, Invited Talk at the 10th Meeting of the Scientific Division of the Croatian Physical Society, Baška, Island Krk, Croatia
- November 30, 2016 “Machine Learning in High Energy Physics”, Poster at the First International Workshop on Data Science, Zagreb, Croatia
- July 19, 2016 “Identification of b jets in boosted event topologies with CMS”, BOOST2016, Zürich, Switzerland
- April 15, 2015 “Multijet Searches at the LHC: Run 1 Highlights and Prospects for Run 2”, UMD HEP Seminar, College Park, MD, USA
- November 5, 2014 “Boosted Higgs and b-tagging and other tools/techniques”, BSM Higgs Workshop @ LPC, Fermilab, USA
- August 19, 2014 “CMS b and quark/gluon tagging”, BOOST2014, University College London, London, UK
- October 3 and 24, 2013 “b Tagging in Boosted Event Topologies (Parts I and II)”, High Energy Experimental Seminar, Rutgers, The State University of New Jersey, Department of Physics & Astronomy, Piscataway, NJ, USA
- September 26, 2013 “Top/Higgs Tagging at the LHC”, LPC Workshop on Exotic Top Partners, Fermilab, USA
- November 12, 2012 “LHC Searches with Jets and Photons”, Chicago 2012 Workshop on LHC Physics, Chicago, IL, USA
- September 6, 2012 “Search for Physics Beyond the Standard Model in Fully Hadronic Final States with the CMS Detector at the LHC”, Division of Experimental Physics Seminar, Ruđer Bošković Institute, Zagreb, Croatia
- July 11, 2012 “Latest Exotica Results with Jets in the Final State from the CMS Experiment”, Santa Fe 2012 Summer Workshop “LHC Now”, Santa Fe, NM, USA
- March 19, 2012 “Hadronic Exotica Searches at CMS”, SEARCH Workshop, College Park, MD, USA
- June 9, 2011 “Search for Pair Production of First-Generation Scalar Leptoquarks with the CMS Experiment at CERN”, High Energy Physics Seminar, Johns Hopkins University, Department of Physics & Astronomy, Baltimore, MD, USA
- May 31, 2011 “Search for Pair Production of First-Generation Scalar Leptoquarks with the CMS Experiment at CERN”, High Energy Experimental Seminar, Rutgers, The State University of New Jersey, Department of Physics & Astronomy, Piscataway, NJ, USA
- May 1, 2011 “Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV”, APS April Meeting, Anaheim, CA, USA
- October 30, 2010 “Results of a Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV”, USLUO Annual Meeting, Fermilab, USA

Grants and Awards

- Ongoing Received [Cogito](#) (French-Croatian Hubert Curien Partnership Programme) grant for 2017–2018. Project title: “**ABC**: Advance **B** tagging in **CMS**”
- March 2018 Awarded the Seal of Excellence for a proposal submitted under the Horizon 2020’s Marie Skłodowska-Curie Actions call H2020-MSCA-IF-2017 (Total score: 92.80%)

- October 2017 Received [NVIDIA GPU Grant](#)
- April 2017 Awarded the Seal of Excellence for a proposal submitted under the Horizon 2020's Marie Skłodowska-Curie Actions call H2020-MSCA-IF-2016 (Total score: 89.20%)
- April 2011 DPF Student Travel Award for the APS April Meeting
- October 2007 Received honorable mention for the Ralph Myers Teaching Award for excellence in teaching in the 2006-2007 academic year
- 2002–2006 Croatian Ministry of Science, Education and Sports Scholarship for exceptional students
- 2005 CERN Summer Student Programme Scholarship of the Croatian Ministry of Science, Education and Sports

Schools and Workshops

- September 25–29, 2017 Attended 2nd International Summer School on Data Science (SSDS 2017) in Split, Croatia
- July 18–22, 2016 Attended BOOST2016: 8th International Workshop on Boosted Object Phenomenology, Reconstruction and Searches in Zürich, Switzerland
- August 10–14, 2015 Attended BOOST2015: 7th International Workshop on Boosted Object Phenomenology, Reconstruction and Searches in Chicago, IL, USA
- August 18–22, 2014 Attended BOOST2014: 6th International Workshop on Boosted Object Phenomenology, Reconstruction and Searches in London, UK
- August 11–16, 2013 Attended BOOST2013: 5th International Workshop on Boosted Object Phenomenology, Reconstruction and Searches in Flagstaff, AZ, USA
- August 2008 Attended CTEQ-MCnet Summer School on QCD Phenomenology and Monte Carlo Event Generators in Debrecen, Hungary
- Summer 2005 CERN Summer Student

Teaching, Supervising and Mentoring

- March, 2018 Taught Introduction to MVA Methods as part of the [Statistical methods in data analysis](#) course for PhD students at the Department of Physics, University of Zagreb
- July 14, 2017 Matej Roguljić, **mag. phys.**, Department of Physics, Faculty of Science, University of Zagreb
Diploma thesis: Development of an algorithm for identification of boosted Higgs bosons decaying in two b quarks using the upgraded CMS pixel detector
- July 8, 2016 Lucija Bajan, **mag. phys.**, Department of Physics, Faculty of Science, University of Zagreb
Diploma thesis: Search for dijet resonances at masses below 1 TeV in proton-proton collisions at a center-of-mass energy of 13 TeV at the Large Hadron Collider
- 2011–2015 As a postdoc at Rutgers University, supervised several undergraduate and PhD students

Media and Outreach

- May 8, 2018 Live video interview from CMS Control Room at the LHC Point 5 with students from Stjepan Radić Elementary School in Brestovec Orehovički, Croatia
- October 7, 2017 Panel speaker at the symposium organized as part of the contemporary art [Touch Me Festival 2017: The Invisible Around Us](#) held in Zagreb

- April 27–28, 2017 Guided Croatian physics students during their visit to CERN
- April 27, 2017 “The Third Element: Dimensions of Space and Matter (*Treći element: Dimenzije prostora i materije*)”, Croatian Radiotelevision (Hrvatska radiotelevizija)
- April 3, 2017 Mentor at the “*International Masterclasses – Hands on Particle Physics*” outreach event for high school students hosted by *Biskupijska klasična gimnazija Ruđera Boškovića s pravom javnosti* at the University of Dubrovnik, Dubrovnik
- March 24, 2017 “The dark side of the starry sky (and can LHC shed some light on it) [*Tamna strana zvjezdanog neba (i može li nam ju LHC rasvijetliti)*]”, Virovitica Town Library (Gradska knjižnica i čitaonica Virovitica), Virovitica
- March 24, 2017 Mentor at the “*International Masterclasses – Hands on Particle Physics*” outreach event for high school students held in *Gimnazija Petra Preradovića*, Virovitica
- March 10 and 31, 2017 Mentor at the “*International Masterclasses – Hands on Particle Physics*” outreach event for high school students held at *Ruđer Bošković Institute*, Zagreb
- May 14, 2016 “The dark side of the starry sky and how can LHC shed some light on it (*Tamna strana zvjezdanog neba i kako nam ju LHC može obasjati*)”, *Open Days* at *Ruđer Bošković Institute*, Zagreb
- March 25, 2016 “*Busy bees*”, Fermilab at Work
- March 14, 2016 Mentor at the “*International Masterclasses – Hands on Particle Physics*” outreach event for high school students held in *Gimnazija Požega*, Požega
- February 19, 2016 Mentor at the “*International Masterclasses – Hands on Particle Physics*” outreach event for high school students held at *Ruđer Bošković Institute*, Zagreb
- February 15, 2016 “*Looking for signs: dijet resonances*”, Fermilab at Work
- November 23–24, 2015 Guided Croatian physics students during their visit to CERN
- April 2, 2015 “*Dinko Ferencek (Ph.D. '11, Physics) Talks Particle Physics*”, UMD CMNS News
- January 30, 2015 “*One measurement, many implications*”, Fermilab Today, *Frontier Science Result: CMS*
- January 17, 2013 “*A Search for 'God particle': A Story of Unification*”, *Croatian Hour*, Embassy of the Republic of Croatia, Washington, DC, USA
- February 25, 2011 “*First supersymmetry results from the LHC*”, Fermilab Today, *CMS Result*
- February 11, 2011 “*CMS joins the hunt for leptoquarks*”, Fermilab Today, *CMS Result of the Month*

Computer Skills

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|-----------------------------|--|
| Operating Systems | Experience with administration of Linux and Microsoft Windows operating systems |
| Office Automation | L ^A T _E X, LibreOffice/OpenOffice, Microsoft Office |
| Programming Languages | C/C++, Python, knowledge of Fortran at the reading level, comfortable with shell scripting |
| Version Control | Experience with CVS, SVN, and Git |
| Analysis Tools and Packages | ROOT, RooFit, TMVA, Mathematica |
| Batch Systems | Experience with Condor and LSF |
| Event Generators | Experience with Pythia and MadGraph event generators |
| CMS Software Tools | Extensive experience with CMSSW, CRAB, and PAT |

Languages

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| Croatian | Native |
| English | Full professional proficiency |

CMS-related Experience

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| ARC Duties | Served as an ARC member for HIN-12-003, EXO-12-042, JME-13-002, EXO-13-008, B2G-14-002, HIN-14-007, B2G-14-001, JME-14-002, HIN-15-012, B2G-16-003 (ARC Chair), JME-16-003, EXO-16-045 (ARC Chair), B2G-17-009, EXO-17-011, B2G-17-004 (ARC Chair), EXO-17-019, HIN-18-002, FTR-18-004, EXO-18-011 <ul style="list-style-type: none">As part of the HIN-12-003 review, proposed a novel trigger combination algorithm that minimizes the statistical uncertainties for data collected using several prescaled triggers. The algorithm has later been used in HIN-14-007 and HIN-15-012 |
| CWR Institutional Reviews | Contributed to the Institutional Review of HIG-11-027, BTV-12-001, EXO-12-016, BPH-13-004, HIG-13-004, HIG-13-021, SUS-13-019, HIG-13-024, EXO-12-053, B2G-16-013, HIN-16-006, B2G-17-005 |
| May 2016–Present | Serving as a Pixel Tracker Detector On-Call (Pixel DOC) shifter |
| January 2015–Present | Serving as RECO and PAT contact for the BTV POG |
| September 2012–Present | Made key contributions to the development and commissioning of subject b tagging used in Higgs and top tagging algorithms employed in searches for new physics in boosted event topologies. Also made key contributions to the development and commissioning of double- b tagging algorithm used for Higgs tagging. |
| January 2017 | Nominated for a convener of the BTV and EXO physics groups for the term Sep. 2017–Sep. 2019 |
| January 2016–August 2016 | Served as a co-convener of the Exotica Jets+X Working Group (successor of the Multijets Working Group) |
| October 2014–December 2015 | Served as a co-convener of the Exotica Multijets Working Group |
| April 2012–July 2016 | Maintained a “bump hunt” limit setting tool used in Exotica dijet analyses for setting Bayesian upper limits (more information available at https://twiki.cern.ch/twiki/bin/view/CMS/DijetLimitCode) |
| January 2016 | Nominated for a convener of the BTV physics group for the term Sep. 2016–Sep. 2018 |
| July 2015 | Prepared and led the b -tagging HATS@LPC held at Fermilab, USA |
| February 2015 | Nominated for a convener of the EXO and BTV physics group for the term Sep. 2015–Sep. 2017 |
| January 2015 | Prepared and led the b tagging and EXO Dijet Resonances exercises at the CMS Data Analysis School 2015 held at Fermilab, USA |
| April 2014 | Nominated for a convener of the BTV physics group for the term Sep. 2014–Sep. 2016 |
| July 2013 | Nominated for a convener of the BTV and JME physics groups and the Analysis Tools group for the years 2014–2015 |
| January 2013–December 2014 | Served as a co-convener of the BTV POG Algorithms and Software Subgroup |

- Maintained b-tagging software framework and documentation, served as RECO and PAT contact and was in charge of code integration
 - Contributed to studies of the b-tagging performance in the context of CMS detector upgrades for the HL-LHC
 - Made key contributions to the rewriting of the b-tagging software framework as part of the CMS preparations for LHC Run 2, making it possible to run b-tagging algorithms from a reduced event data format and retaining the same level of flexibility as in Run 1
 - Developed jet flavor definition based on clustering generator-level hadrons/partons and constituents of reconstructed jets which is now a default jet flavor definition at CMS (more information available at <https://twiki.cern.ch/twiki/bin/view/CMSPublic/SWGuideBTagMCTools>)
 - Wrote extensive documentation on applying b-tagging efficiency scale factors to simulated events (more information available at <https://twiki.cern.ch/twiki/bin/viewauth/CMS/BTagSFMMethods>)
- December 2011–December 2013 Served as a b-tagging object expert for the Exotica PAG and an Exotica PAG contact person for the BTV POG
- January 2011 Prepared and led the *MET and High-MET Event Scan Exercise* at the *CMS Data Analysis School 2011* held at Fermilab, USA
- 2010–2011 Involved in a scan of high-MET events
- From January to May 2011, coordinated a high-MET event scan effort within the MET Working Group (more information available at <https://twiki.cern.ch/twiki/bin/view/CMS/MissingETScanners>)
- February 2009–July 2010 Based at CERN performing the following HCAL service work activities:
- Responsible for HCAL pedestal tuning
 - Worked on HCAL DQM code development
 - HCAL test beam 2009: worked on wire chamber calibration and was in charge of setting up the test beam DQM (<https://twiki.cern.ch/twiki/bin/view/CMS/TestBeam2009>, <https://indico.cern.ch/event/65028/contribution/2/material/slides/0.pdf>)
 - During the last 12 months at CERN served as one of the on-call HCAL operations experts
 - During the last 4 months at CERN served as one of the HCAL Prompt Feedback Group contacts
 - In June 2010, served as an HCAL Operations Coordinator
 - Within the HCAL Noise Task Force, worked as one of the main developers of the HF noise cleaning algorithms later included in the standard event reconstruction
- Late 2009–Early 2010 Contributed to MET commissioning studies with first collision data at $\sqrt{s} = 900$ and 2360 GeV

CMS Internal Documents³

- 2016 S. Abu Zeid et al., “Performance of b-tagging algorithms at 13 TeV”, *CMS Analysis Note* **2016/036**

³Restricted access. Available at <http://cms.cern.ch/iCMS/jsp/iCMS.jsp?mode=single&block=publications>

- 2015 N. Saoulidou et al., “Search for narrow resonances using the dijet mass spectrum with 2.45 fb^{-1} of proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”, *CMS Analysis Note* **2015/175**
- 2015 N. Saoulidou et al., “Search for narrow resonances using the dijet mass spectrum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ (Phys14 MC analysis)”, *CMS Analysis Note* **2015/063**
- 2015 D. Bloch et al., “Combination of b-tagging efficiency measurements for the Legacy Rereco of 2011 data at 7 TeV pp collision”, *CMS Analysis Note* **2015/043**
- 2014 R. Syarif et al., “Performance of b tagging in boosted topology events”, *CMS Performance Note* **2014/031**
- 2013 W. Adam et al., “Combination of b-tagging efficiency measurements for the 22Jan2013 Rereco of 2012 data at 8 TeV pp collision”, *CMS Analysis Note* **2013/212**
- 2013 D. Bloch et al., “Identification of b-quark jets in boosted topologies”, *CMS Analysis Note* **2013/185**
- 2013 J. P. Chou et al., “Search for Narrow Resonances Using the Dijet Mass Spectrum in pp Collisions at $\sqrt{s} = 8 \text{ TeV}$ with Full 2012 Dataset”, *CMS Analysis Note* **2012/455**
- 2013 J. P. Chou et al., “Search for Paired Dijet Resonances in the 4 Jet Final State”, *CMS Analysis Note* **2012/449**
- 2013 N. Bakirci et al., “Search for b-tagged Dijet Resonances at $\sqrt{s} = 8 \text{ TeV}$ ”, *CMS Analysis Note* **2012/442**
- 2013 S. Khalil et al., “Search for vector-like bottom quark partners in single-lepton final states”, *CMS Analysis Note* **2012/438**
- 2012 J. P. Chou et al., “Search for High-mass $b\bar{b}$ Dijet Resonances”, *CMS Analysis Note* **2012/108**
- 2010 S. Eno et al., “Search for Pair Production of First-Generation Scalar Leptoquarks Using Events Produced in pp Collisions at $\sqrt{s} = 7 \text{ TeV}$ Containing One Electron, Two Jets and Large Missing Transverse Energy”, *CMS Analysis Note* **2010/361**
- 2010 S. Eno et al., “Search for Pair Production of First Generation Scalar Leptoquarks Using Events Containing Two Electrons And Two Jets Produced in pp Collisions at $\sqrt{s} = 7 \text{ TeV}$ ”, *CMS Analysis Note* **2010/230**
- 2010 H. Liu et al., “Results of a visual scan of high- \cancel{E}_T events in 7 TeV pp collision data”, *CMS Analysis Note* **2010/219**
- 2010 F. Chlebana et al., “Optimization and Performance of HF PMT Hit Cleaning Algorithms Developed Using pp Collision Data at $\sqrt{s} = 0.9, 2.36$ and 7 TeV”, *CMS Detector Note* **2010/008**
- 2010 K. Hatakeyama et al., “Commissioning of Uncorrected Calorimeter Missing Transverse Energy in Zero Bias and Minimum Bias Events at $\sqrt{s} = 900$ and 2360 GeV”, *CMS Analysis Note* **2010/029**
- 2010 J. Weng et al., “JetMET Data Quality Monitoring and Prompt Analysis of Jets in the First Collision Data at CMS”, *CMS Analysis Note* **2010/007**
- 2010 S. Chatrchyan et al., “Study of Various Photomultiplier Tubes with Muon Beams and Cerenkov Light Produced in Electron Showers”, *CMS Note* **2010/003**
- 2009 S. Eno et al., “Offset Energy Correction for Cone Jets”, *CMS Analysis Note* **2009/035**

- 2009 S. Eno et al., “Study of Impact of HO on Jet Reconstruction”, *CMS Analysis Note 2009/007*
- 2008 S. Eno et al., “Search for Pair Production of First Generation Scalar Leptoquarks at the CMS Experiment”, *CMS Analysis Note 2008/070*
- 2006 V. Brigljević et. al., “Study of Di-Boson Production with the CMS Detector at LHC”, *CMS Note 2006/108*
- 2006 V. Brigljević et. al., “Study of the process $pp \rightarrow WZ^0 \rightarrow l^\pm l^+ l^- (l = e, \mu)$ at CMS”, *CMS Analysis Note 2006/063*

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