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Education Information

Doctorate, Bogazici University, Institute Of Science, Physics, Turkey 2006 - 2011

Undergraduate, Bogazici University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 2000 - 2005

Foreign Languages

English, C2 Mastery

Research Areas

Physics, High Energy Physics, Experimental High Energy Physics Studies, Particle Accelerators, Particle Detectors and Calorimeters, Physics Analysis and Simulation Studies

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2023 - Continues

Assistant Professor, Ozyegin University, Faculty Of Engineering, Department Of Basic Engineering Sciences, 2012 - 2023

Research Assistant, Bogazici University, Faculty Of Arts And Sciences, Department Of Physics, 2006 - 2011

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Nuclear modification of Y states in pPb collisions at $s_{NN}=5.02\text{TeV}$**
Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Flechl M., Frühwirth R., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- II. **Search for new particles in an extended Higgs sector with four b quarks in the final state at $s=13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- III. **Evidence for WW/WZ vector boson scattering in the decay channel $\ell\nu qq$ produced in association with two jets in proton-proton collisions at $s=13\text{TeV}$**

- Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.834, 2022 (SCI-Expanded)
- IV. **Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
Nature Physics, vol.18, no.11, pp.1329-1334, 2022 (SCI-Expanded)
- V. **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $s=13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.832, 2022 (SCI-Expanded)
- VI. **Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state at $\sqrt{s} = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.9, 2022 (SCI-Expanded)
- VII. **Search for Higgs Boson Pair Production in the Four b Quark Final State in Proton-Proton Collisions at $s = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
Physical Review Letters, vol.129, no.8, 2022 (SCI-Expanded)
- VIII. **Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.8, 2022 (SCI-Expanded)
- IX. **Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $s = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Physical Review Letters, vol.129, no.3, 2022 (SCI-Expanded)
- X. **Search for Resonances Decaying to Three W Bosons in Proton-Proton Collisions at $s = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
Physical Review Letters, vol.129, no.2, 2022 (SCI-Expanded)
- XI. **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at $s_{NN} = 5.02\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
Physical Review Letters, vol.129, no.2, 2022 (SCI-Expanded)
- XII. **First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $s = 13\text{TeV}$**
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.
Physical Review Letters, vol.129, no.1, 2022 (SCI-Expanded)
- XIII. **Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $\sqrt{s} = 13\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)
- XIV. **Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at \sqrt{s}**

=13 TeV

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)

- XV. **Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at $\sqrt{s} = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)

- XVI. **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at $s = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

Physical Review D, vol.106, no.1, 2022 (SCI-Expanded)

- XVII. **Identification of hadronic tau lepton decays using a deep neural network**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of Instrumentation, vol.17, no.7, 2022 (SCI-Expanded)

- XVIII. **Search for heavy resonances decaying to $Z(\nu\nu^*)V(qq^*)$ in proton-proton collisions at $s = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Physical Review D, vol.106, no.1, 2022 (SCI-Expanded)

- XIX. **Observation of the B_c^+ Meson in Pb-Pb and pp Collisions at $s_{NN} = 5.02$ TeV and Measurement of its Nuclear Modification Factor**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

Physical Review Letters, vol.128, no.25, 2022 (SCI-Expanded)

- XX. **Observation of B_s^0 mesons and measurement of the B_s^0/B^+ yield ratio in PbPb collisions at [Formula presented] TeV**

Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.829, 2022 (SCI-Expanded)

- XXI. **Analysis of the CP structure of the Yukawa coupling between the Higgs boson and τ leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

- XXII. **Search for resonant production of strongly coupled dark matter in proton-proton collisions at 13 TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

- XXIII. **Inclusive nonresonant multilepton probes of new phenomena at $s = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

Physical Review D, vol.105, no.11, 2022 (SCI-Expanded)

- XXIV. **Search for charged-lepton flavor violation in top quark production and decay in pp collisions at $\sqrt{s} = 13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

- XXV. **FACET: a new long-lived particle detector in the very forward region of the CMS experiment**
Cerci S., Sunar Cerci D., Lazic D., Landsberg G., Cerutti F., Sabaté-Gilarte M., Albrow M., Berryhill J., Green D., Hirschauser J., et al.
Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)
- XXVI. **Measurement of the inclusive and differential $t\bar{t}\gamma$ cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- XXVII. **Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- XXVIII. **Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- XXIX. **Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- XXX. **Observation of $B^0 \rightarrow \psi(2S)K^0S\pi^+\pi^-$ and $B^0S \rightarrow \psi(2S)K^0S$ decays**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.
European Physical Journal C, vol.82, no.5, 2022 (SCI-Expanded)
- XXXI. **Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at $s = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
Physical Review D, vol.105, no.9, 2022 (SCI-Expanded)
- XXXII. **Measurement of the production cross section for Z+b jets in proton-proton collisions at $s = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Physical Review D, vol.105, no.9, 2022 (SCI-Expanded)
- XXXIII. **Precision measurement of the W boson decay branching fractions in proton-proton collisions at $s = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
Physical Review D, vol.105, no.7, 2022 (SCI-Expanded)
- XXXIV. **Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- XXXV. **Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)

- XXXVI. **Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- XXXVII. **Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- XXXVIII. **Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- XXXIX. **Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $\sqrt{s} = 5.02$ TeV**
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.825, 2022 (SCI-Expanded)
- XL. **Search for heavy neutrinos and WR bosons with right-handed couplings in a left-right symmetric model in pp collisions at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physical Review Letters, vol.109, no.26, 2012 (SCI-Expanded)
- XLI. **A new Boson with a mass of 125 GeV observed with the CMS experiment at the large hadron collider**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Science, vol.338, no.6114, pp.1569-1575, 2012 (SCI-Expanded)
- XLII. **Study of the dijet mass spectrum in $pp \rightarrow W + \text{jets}$ events at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physical Review Letters, vol.109, no.25, 2012 (SCI-Expanded)
- XLIII. **Combined search for the quarks of a sequential fourth generation**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.86, no.11, 2012 (SCI-Expanded)
- XLIV. **Search for pair produced fourth-generation up-type quarks in pp collisions at $\sqrt{s} = 7$ TeV with a lepton in the final state**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.718, no.2, pp.307-328, 2012 (SCI-Expanded)
- XLV. **Search for heavy lepton partners of neutrinos in proton-proton collisions in the context of the type III seesaw mechanism**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.718, no.2, pp.348-368, 2012 (SCI-Expanded)
- XLVI. **Search for a fermiophobic Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.

- Journal of High Energy Physics, vol.2012, no.9, 2012 (SCI-Expanded)
- XLVII. **Measurement of the top-quark mass in $t\bar{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Journal of High Energy Physics, vol.2012, no.12, 2012 (SCI-Expanded)
- XLVIII. **Search for heavy bottom-like quarks in 4.9 fb⁻¹ of pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2012, no.5, 2012 (SCI-Expanded)
- XLIX. **Observation of sequential Υ suppression in PbPb collisions**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Physical Review Letters, vol.109, no.22, 2012 (SCI-Expanded)
- L. **Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Journal of High Energy Physics, vol.2012, no.11, 2012 (SCI-Expanded)
- LI. **Study of the inclusive production of charged pions, kaons, and protons in pp collisions at $\sqrt{s}=0.9, 2.76$ and 7 TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 European Physical Journal C, vol.72, no.10, pp.1-37, 2012 (SCI-Expanded)
- LII. **Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Journal of High Energy Physics, vol.2012, no.11, 2012 (SCI-Expanded)
- LIII. **Search for charge-asymmetric production of W^\pm bosons in $t\bar{t}$ +jet events from pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.717, no.4-5, pp.351-370, 2012 (SCI-Expanded)
- LIV. **Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Physical Review Letters, vol.109, no.17, 2012 (SCI-Expanded)
- LV. **Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at 7 TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.86, no.7, 2012 (SCI-Expanded)
- LVI. **Search for heavy Majorana neutrinos in $\mu^\pm\mu^\pm$ +jets and $e^\pm e^\pm$ +jets events in pp collisions at $\sqrt{s}=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.717, no.1-3, pp.109-128, 2012 (SCI-Expanded)

- LVII. Inclusive and differential measurements of the tt- charge asymmetry in proton-proton collisions at $s=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.717, no.1-3, pp.129-150, 2012 (SCI-Expanded)
- LVIII. Measurement of the pseudorapidity and centrality dependence of the transverse energy density in pb-pb collisions at \sqrt{s} NN=2.76TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.109, no.15, 2012 (SCI-Expanded)
- LIX. Search for a W' or Techni- ρ decaying into WZ in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physical Review Letters, vol.109, no.14, 2012 (SCI-Expanded)
- LX. Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of Instrumentation, vol.7, no.10, 2012 (SCI-Expanded)
- LXI. Tests of CMS hadron forward calorimeter upgrade readout box prototype**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Mossolov V., Shumeiko N., Cornelis T., Ochesanu S., Roland B., Staykova Z., et al.
Journal of Instrumentation, vol.7, no.10, 2012 (SCI-Expanded)
- LXII. Search for pair production of first- and second-generation scalar leptoquarks in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.86, no.5, 2012 (SCI-Expanded)
- LXIII. Search for a light pseudoscalar Higgs boson in the dimuon decay channel in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.109, no.12, 2012 (SCI-Expanded)
- LXIV. Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.716, no.2, pp.260-284, 2012 (SCI-Expanded)
- LXV. Search for high-mass resonances decaying into τ -lepton pairs in pp collisions at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.716, no.1, pp.82-102, 2012 (SCI-Expanded)
- LXVI. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.716, no.1, pp.30-61, 2012 (SCI-Expanded)
- LXVII. Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at $\sqrt{s} = 7$ TeV**

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.716, no.1, pp.103-121, 2012 (SCI-Expanded)

LXVIII. Measurement of the underlying event activity in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV with the novel jet-area/median approach

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2012, no.8, 2012 (SCI-Expanded)

LXIX. Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2012, no.8, 2012 (SCI-Expanded)

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

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.109, no.11, 2012 (SCI-Expanded)

LXXI. Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

European Physical Journal C, vol.72, no.9, pp.1-24, 2012 (SCI-Expanded)

LXXII. Study of W boson production in PbPb and pp collisions at $s_{NN}=2.76$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.715, no.1-3, pp.66-87, 2012 (SCI-Expanded)

LXXIII. Search for leptonic decays of W' bosons in pp collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2012, no.8, 2012 (SCI-Expanded)

LXXIV. Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.109, no.7, 2012 (SCI-Expanded)

LXXV. Search for narrow resonances in dilepton mass spectra in pp collisions at $s=7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.714, no.2-5, pp.158-179, 2012 (SCI-Expanded)

LXXVI. Measurement of the Λ b cross section and the Λ - b to Λ b ratio with $J/\psi\Lambda$ decays in pp collisions at $s=7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.714, no.2-5, pp.136-157, 2012 (SCI-Expanded)

LXXVII. Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

- Friedl M., et al.
Journal of High Energy Physics, vol.2012, no.6, 2012 (SCI-Expanded)
- LXXVIII. **Search for heavy long-lived charged particles in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.713, no.4-5, pp.408-433, 2012 (SCI-Expanded)
- LXXIX. **Azimuthal anisotropy of charged particles at high transverse momenta in Pb-Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.109, no.2, 2012 (SCI-Expanded)
- LXXX. **Search for dark matter and large extra dimensions in pp collisions yielding a photon and missing transverse energy**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.108, no.26, 2012 (SCI-Expanded)
- LXXXI. **Observation of a new Ξ b baryon**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.108, no.25, 2012 (SCI-Expanded)
- LXXXII. **Search for neutral Higgs bosons decaying to tau pairs in pp collisions at $s=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.713, no.2, pp.68-90, 2012 (SCI-Expanded)
- LXXXIII. **Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s}=7$ TeV in dilepton final states containing a τ**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.85, no.11, 2012 (SCI-Expanded)
- LXXXIV. **Jet momentum dependence of jet quenching in PbPb collisions at $s_{NN}=2.76$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.712, no.3, pp.176-197, 2012 (SCI-Expanded)
- LXXXV. **Inclusive b-jet production in pp collisions at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2012, no.4, 2012 (SCI-Expanded)
- LXXXVI. **Search for microscopic black holes in pp collisions at $\sqrt{s} = 7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2012, no.4, 2012 (SCI-Expanded)
- LXXXVII. **Search for large extra dimensions in dimuon and dielectron events in pp collisions at $s=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.711, no.1, pp.15-34, 2012 (SCI-Expanded)
- LXXXVIII. **Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow l+l-\tau+\tau$ - decay channel in pp collisions at $\sqrt{s} = 7$ TeV**

Chatrchyan S., Khachatryan V., Sirunyan M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2012, no.3, 2012 (SCI-Expanded)

- LXXXIX. **Search for the standard model Higgs boson decaying into two photons in pp collisions at $\sqrt{s}=7\text{TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.710, no.3, pp.403-425, 2012 (SCI-Expanded)
- XC. **Measurement of isolated photon production in pp and PbPb collisions at $s_{NN}=2.76\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.710, no.2, pp.256-277, 2012 (SCI-Expanded)
- XCI. **Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at $s=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.710, no.2, pp.284-306, 2012 (SCI-Expanded)
- XCII. **Search for the standard model Higgs boson decaying to $W+W^-$ in the fully leptonic final state in pp collisions at $s=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.710, no.1, pp.91-113, 2012 (SCI-Expanded)
- XCIII. **Combined results of searches for the standard model Higgs boson in pp collisions at $s=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.710, no.1, pp.26-48, 2012 (SCI-Expanded)
- XCIV. **J/ψ and $\psi(2S)$ production in pp collisions at $\sqrt{s} = 7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2012, no.2, 2012 (SCI-Expanded)
- XCv. **Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s}=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.709, no.1-2, pp.28-49, 2012 (SCI-Expanded)
- XCvI. **Search for the standard model Higgs boson in the decay channel $H\rightarrow ZZ\rightarrow 4l$ in pp collisions at $\sqrt{s}=7\text{TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.108, no.11, 2012 (SCI-Expanded)
- XCvII. **Search for signatures of extra dimensions in the diphoton mass spectrum at the large hadron collider**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.108, no.11, 2012 (SCI-Expanded)
- XCvIII. **Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

Friedl M., et al.

Journal of High Energy Physics, vol.2012, no.1, 2012 (SCI-Expanded)

XCIX. Inclusive search for squarks and gluinos in pp collisions at $\sqrt{s}=7\text{TeV}$

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.85, no.1, 2012 (SCI-Expanded)

C. Search for a vectorlike quark with charge $2/3$ in $t+Z$ events from pp collisions at $\sqrt{s}=7\text{TeV}$

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.107, no.27, 2011 (SCI-Expanded)

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

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.84, no.11, 2011 (SCI-Expanded)

CII. Measurement of the underlying event activity at the LHC with $\sqrt{s} = 7\text{ TeV}$ and comparison with $\sqrt{s} = 0:9\text{ TeV}$

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.9, 2011 (SCI-Expanded)

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

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)

CIV. Search for supersymmetry at the LHC in events with jets and missing transverse energy

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.107, no.22, 2011 (SCI-Expanded)

CV. Measurement of the inclusive W and Z production cross sections in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the CMS experiment

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.10, 2011 (SCI-Expanded)

CVI. Measurement of the $t\bar{t}$ production cross section in pp collisions at 7 TeV in lepton+jets events using b-quark jet identification

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.84, no.9, 2011 (SCI-Expanded)

CVII. Search for new physics with a monojet and missing transverse energy in pp collisions at $\sqrt{s}=7\text{TeV}$

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.107, no.20, 2011 (SCI-Expanded)

CVIII. Search for $B_s0\rightarrow\mu+\mu-$ and $B0\rightarrow\mu+\mu-$ decays in pp collisions at $\sqrt{s}=7\text{TeV}$

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Physical Review Letters, vol.107, no.19, 2011 (SCI-Expanded)

CIX. Determination of jet energy calibration and transverse momentum resolution in CMS

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of Instrumentation, vol.6, no.11, 2011 (SCI-Expanded)

- CX. Search for physics beyond the standard model using multilepton signatures in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.704, no.5, pp.411-433, 2011 (SCI-Expanded)
- CXI. Measurement of $B\bar{B}$ angular correlations based on secondary vertex reconstruction at $\sqrt{s} = 7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Journal of High Energy Physics, vol.2011, no.3, 2011 (SCI-Expanded)
- CXII. Measurement of the differential cross section for isolated prompt photon production in pp collisions at 7 TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.84, no.5, 2011 (SCI-Expanded)
- CXIII. Measurement of the B_s^0 production cross section with $B_s^0 \rightarrow J/\psi$ Decays in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.84, no.5, 2011 (SCI-Expanded)
- CXIV. Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.107, no.13, 2011 (SCI-Expanded)
- CXV. Search for first generation scalar leptoquarks in the $evjj$ channel in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.703, no.3, pp.246-266, 2011 (SCI-Expanded)
- CXVI. Missing transverse energy performance of the CMS detector**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of Instrumentation, vol.6, no.9, 2011 (SCI-Expanded)
- CXVII. Search for three-jet resonances in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.107, no.10, 2011 (SCI-Expanded)
- CXVIII. Measurement of the t-channel single top quark production cross section in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.107, no.9, 2011 (SCI-Expanded)
- CXIX. Observation and studies of jet quenching in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review C - Nuclear Physics, vol.84, no.2, 2011 (SCI-Expanded)
- CXX. Indications of suppression of excited? States in Pb-Pb collisions at $s_{NN}2.76$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.107, no.5, 2011 (SCI-Expanded)
- CXXI. Measurement of the polarization of w bosons with large transverse momenta in W+jets events at the LHC**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

- Friedl M., et al.
Physical Review Letters, vol.107, no.2, 2011 (SCI-Expanded)
- CXXII. **Search for a W' boson decaying to a muon and a neutrino in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.701, no.2, pp.160-179, 2011 (SCI-Expanded)
- CXXIII. **Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s}=7$ TeV using the kinematic properties of events with leptons and jets**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
European Physical Journal C, vol.71, no.9, pp.1-27, 2011 (SCI-Expanded)
- CXXIV. **Measurement of the B^0 production cross section in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.106, no.25, 2011 (SCI-Expanded)
- CXXV. **Upsilon production cross section in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, vol.83, no.11, 2011 (SCI-Expanded)
- CXXVI. **Measurement of the differential dijet production cross section in proton-proton collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.700, no.3-4, pp.187-206, 2011 (SCI-Expanded)
- CXXVII. **Search for neutral minimal supersymmetric standard model higgs bosons decaying to tau pairs in pp collisions at $\sqrt{s}=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.106, no.23, 2011 (SCI-Expanded)
- CXXVIII. **Search for supersymmetry in pp collisions at $\sqrt{s}=7$ TeV in events with two photons and missing transverse energy**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.106, no.21, 2011 (SCI-Expanded)
- CXXIX. **Study of Z boson production in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physical Review Letters, vol.106, no.21, 2011 (SCI-Expanded)
- CXXX. **Measurement of dijet angular distributions and search for quark compositeness in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.20, 2011 (SCI-Expanded)
- CXXXI. **Search for pair production of second-generation scalar leptoquarks in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.20, 2011 (SCI-Expanded)
- CXXXII. **Search for pair production of first-generation scalar leptoquarks in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M.,

- Frühwirth R., et al.
Physical Review Letters, vol.106, no.20, 2011 (SCI-Expanded)
- CXXXIII. **Measurement of $W+W-$ production and search for the Higgs boson in pp collisions at $s=7$ TeV**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.699, no.1-2, pp.25-47, 2011 (SCI-Expanded)
- CXXXIV. **First measurement of hadronic event shapes in pp collisions at $s=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.699, no.1-2, pp.48-67, 2011 (SCI-Expanded)
- CXXXV. **Search for supersymmetry in pp collisions at 7 TeV in events with jets and missing transverse energy**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.698, no.3, pp.196-218, 2011 (SCI-Expanded)
- CXXXVI. **Search for a heavy gauge boson W' in the final state with an electron and large missing transverse energy in pp collisions at $s=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.698, no.1, pp.21-39, 2011 (SCI-Expanded)
- CXXXVII. **Dijet azimuthal decorrelations in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.12, 2011 (SCI-Expanded)
- CXXXVIII. **Search for microscopic black hole signatures at the Large Hadron Collider**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.697, no.5, pp.434-453, 2011 (SCI-Expanded)
- CXXXIX. **Measurement of the B^+ production cross section in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.11, 2011 (SCI-Expanded)
- CXL. **Measurement of the isolated prompt photons production cross section in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.8, 2011 (SCI-Expanded)
- CXLI. **First measurement of the cross section for top-quark pair production in proton-proton collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.695, no.5, pp.424-443, 2011 (SCI-Expanded)
- CXLII. **Search for stopped gluinos in pp collisions at $\sqrt{s}=7$ TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.106, no.1, 2011 (SCI-Expanded)

- CXLIII. Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at $\sqrt{s} = 7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.4, 2011 (SCI-Expanded)
- CXLIV. Strange particle production in pp collisions at $\sqrt{s} = 0.9$ and 7 TeVs**
 Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
 Journal of High Energy Physics, vol.2011, no.5, 2011 (SCI-Expanded)
- CXLV. Search for heavy stable charged particles in pp collisions at $\sqrt{s} = 7$ TeV**
 Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
 Journal of High Energy Physics, vol.2011, no.3, 2011 (SCI-Expanded)
- CXLVI. Measurement of $W\gamma$ and $Z\gamma$ production in pp collisions at $s=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.701, no.5, pp.535-555, 2011 (SCI-Expanded)
- CXLVII. Measurement of the inclusive Z cross section via decays to tau pairs in pp collisions at $\sqrt{s} = 7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)
- CXLVIII. Search for resonances in the dilepton mass distribution in pp collisions at $\sqrt{s} = 7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.5, 2011 (SCI-Expanded)
- CXLIX. Measurement of the tt production cross section and the top quark mass in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV: The CMS collaboration**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.7, 2011 (SCI-Expanded)
- CL. Charged particle transverse momentum spectra in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)
- CLI. Search for supersymmetry in events with b jets and missing transverse momentum at the LHC**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.7, 2011 (SCI-Expanded)
- CLII. Measurements of inclusive W and Z cross sections in pp collisions at $\sqrt{s} = 7$ TeV The CMS collaboration**
 Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
 Journal of High Energy Physics, vol.2011, no.1, 2011 (SCI-Expanded)
- CLIII. Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
 Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)
- CLIV. A search for excited leptons in pp collisions at $s=7$ TeV**
 Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

Friedl M., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.704, no.3, pp.143-162, 2011 (SCI-Expanded)

- CLV. **Charged particle multiplicities in pp interactions at $\sqrt{s} = 0.9, 2.36, \text{ and } 7\text{TeV}$**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Journal of High Energy Physics, vol.2011, no.1, 2011 (SCI-Expanded)
- CLVI. **Measurement of the ratio of the 3-jet to 2-jet cross sections in pp collisions at $s=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.702, no.5, pp.336-354, 2011 (SCI-Expanded)
- CLVII. **Search for a heavy bottom-like quark in pp collisions at $\sqrt{s}=7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.701, no.2, pp.204-223, 2011 (SCI-Expanded)
- CLVIII. **Search for same-sign top-quark pair production at $\sqrt{s} = 7\text{ TeV}$ and limits onavour changing neutral currents in the top sector**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)
- CLIX. **Inclusive b-hadron production cross section with muons in pp collisions at $\sqrt{s} = 7\text{ TeV}$**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Journal of High Energy Physics, vol.2011, no.3, 2011 (SCI-Expanded)
- CLX. **Search for resonances in the dijet mass spectrum from 7 TeV pp collisions at CMS**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.704, no.3, pp.123-142, 2011 (SCI-Expanded)
- CLXI. **Long-range and short-range dihadron angular correlations in central PbPb collisions at $\sqrt{s_{NN}} = 2.76\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2011, no.7, 2011 (SCI-Expanded)
- CLXII. **Measurement of energy flow at large pseudorapidities in pp collisions at $\sqrt{s} = 0.9 \text{ and } 7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2011, no.11, 2011 (SCI-Expanded)
- CLXIII. **Prompt and non-prompt J/ψ production in pp collisions at $\sqrt{s} = 7\text{ TeV}$**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
European Physical Journal C, vol.71, no.3, pp.1-26, 2011 (SCI-Expanded)
- CLXIV. **Search for large extra dimensions in the diphoton final state at the Large Hadron Collider**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.
Journal of High Energy Physics, vol.2011, no.5, 2011 (SCI-Expanded)
- CLXV. **Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7\text{ TeV}$**
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.10, 2011 (SCI-Expanded)

CLXVI. Search for light resonances decaying into pairs of muons as a signal of new physics

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.7, 2011 (SCI-Expanded)

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

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.6, 2011 (SCI-Expanded)

CLXVIII. Search for new physics with jets and missing transverse momentum in pp collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.8, 2011 (SCI-Expanded)

CLXIX. Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at $\sqrt{s} = 7$ TeV

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

Journal of High Energy Physics, vol.2011, no.6, 2011 (SCI-Expanded)

CLXX. Search for quark compositeness with the dijet centrality ratio in pp collisions at $\sqrt{s}=7$ TeV

Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.

Physical Review Letters, vol.105, no.26, 2010 (SCI-Expanded)

CLXXI. Fine synchronization of the CMS muon drift-tube local trigger using cosmic rays

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXII. Performance and operation of the CMS electromagnetic calorimeter

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXIII. Performance of the CMS cathode strip chambers with cosmic rays

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXIV. Performance of the CMS drift-tube chamber local trigger with cosmic rays

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXV. Performance of the CMS hadron calorimeter with cosmic ray muons and LHC beam data

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXVI. CMS data processing workflows during an extended cosmic ray run

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

CLXXVII. Time reconstruction and performance of the CMS electromagnetic calorimeter

Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.

Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)

- CLXXVIII. **Performance study of the CMS barrel resistive plate chambers with cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXIX. **Commissioning of the CMS High-Level Trigger with cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXX. **Commissioning of the CMS experiment and the cosmic run at four tesla**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXI. **Performance of CMS hadron calorimeter timing and synchronization using test beam, cosmic ray, and LHC beam data**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXII. **Precise mapping of the magnetic field in the CMS barrel yoke using cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXIII. **Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXIV. **Measurement of the muon stopping power in lead tungstate**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXV. **Alignment of the CMS muon system with cosmic-ray and beam-halo muons**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXVI. **Performance of the CMS Level-1 trigger during commissioning with cosmic ray muons and LHC beams**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXVII. **Commissioning and performance of the CMS pixel tracker with cosmic ray muons**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- LXXXVIII. **Alignment of the CMS silicon tracker during commissioning with cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CLXXXIX. **Commissioning and performance of the CMS silicon strip tracker with cosmic ray muons**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CXC. **CMS tracking performance results from early LHC operation**

Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.

European Physical Journal C, vol.70, no.4, pp.1165-1192, 2010 (SCI-Expanded)

- CXCI. **Calibration of the CMS drift tube chambers and measurement of the drift velocity with cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CXCII. **Performance of the CMS drift tube chambers with cosmic rays**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CXCIII. **Aligning the CMS muon chambers with the muon alignment system during an extended cosmic ray run**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CXCIV. **Performance of CMS muon reconstruction in cosmic-ray events**
Chatrchyan S., Khachatryan V., Sirunyan A., Adam W., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Eichberger M., Erö J., et al.
Journal of Instrumentation, vol.5, no.3, 2010 (SCI-Expanded)
- CXCV. **Search for dijet resonances in 7 TeV pp collisions at CMS**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.105, no.21, 2010 (SCI-Expanded)
- CXCVI. **First measurement of Bose-Einstein correlations in proton-proton collisions at $\sqrt{s}=0.9$ and 2.36 TeV at the LHC**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.105, no.3, 2010 (SCI-Expanded)
- CXCVII. **Study of various photomultiplier tubes with muon beams and erenkov light produced in electron showers**
Chatrchyan S., Khachatryan V., Sirunyan A., Mossolov V., Shumeiko N., De Wolf E., Ochesanu S., Roland B., Van Haeveermaet H., Van Mechelen P., et al.
Journal of Instrumentation, vol.5, no.6, 2010 (SCI-Expanded)
- CXCVIII. **Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s}=7\text{TeV}$**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physical Review Letters, vol.105, no.2, 2010 (SCI-Expanded)
- CXCIX. **Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 0.9$ and 2.36TeV**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Friedl M., Frühwirth R., Ghete V., et al.
Journal of High Energy Physics, vol.2010, no.2, 2010 (SCI-Expanded)
- CC. **Measurement of the charge ratio of atmospheric muons with the CMS detector**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.692, no.2, pp.83-104, 2010 (SCI-Expanded)
- CCI. **Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M.,

Frühwirth R., et al.

Journal of High Energy Physics, vol.2010, no.9, 2010 (SCI-Expanded)

CCII. First measurement of the underlying event activity at the LHC with $\sqrt{s} = 0.9$ TeV

Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.

European Physical Journal C, vol.70, no.3, pp.555-572, 2010 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. Recent results on QCD and Heavy Ion physics from CMS

Işildak B.

Workshop "Excited QCD 2011", Les Houches, France, 20 - 25 February 2011, vol.4, pp.579-583