

Директору ОИЯИ

академику РАН Г.В.Трубникову

**от Гавриленко Михаила Григорьевича, научного
сотрудника сектора №1 новой физики на CMS,
НЭОФCMS**

(ФИО, должность, сектор, отдел,

**Отделение №4 Физики на
встречных пучках, ЛФВЭ**
отделение, лаборатория)

ЗАЯВЛЕНИЕ

Прошу Вас допустить меня к участию в выборах на замещение вакантной должности

**Научного сотрудника сектора №1 новой физики на CMS
в научно-экспериментальном отделе физики на CMS,
отделения №4 Физики на встречных пучках, ЛФВЭ.**
(название должности, сектора, отдела, отделения, лаборатории)

Гавриленко М.Г.
13.07.2021



Научная биография (Curriculum Vitae)

Научного сотрудника Научно-Экспериментального Отдела Физики на CMS, сектора №1 новой физики на CMS, отделения №4 Физики на встречных пучках, ЛФВЭ

(название занимаемой должности, отдела, сектора, отделения, лаборатории)

Гавриленко Михаила Григорьевича

(Ф.И.О.)

Ф.И.О: Гавриленко Михаил Григорьевич;

Дата и место рождения: 19.04.1986 г.р., Московская область г. Дубна;

Образование: Высшее образование. МГУ 2009 год, Физический факультет, специальность «Физика высоких энергий»;

Профессиональная научная деятельность:

Тема 1118 «Информационно вычислительная инфраструктура ОИЯИ» 2011-2012 г.

Тема 1083 «CMS. Компактный мюонный соленоид на LHC. Модернизация детектора CMS» с 2011 г. по н.в.

2007-2008 г. НИИЯФ МГУ, начал изучать процесс генерации и обработки данных, первый опыт по обработке данных основан на экспериментах RICH и STAR. Освоение физического программного обеспечения.

2009 г. Поступил в аспирантуру МУПОЧ «Дубна» по специальности 05.13.01 - «Системный анализ, управление и обработка информации».

2010 г. Принят на работу в сектор 1 НЭОФCMS отделение 4 ЛФВЭ в должности и.о. м.н.с.

2010-2012 г. Разработка системы мониторинга дискового пространства VO CMS в ОИЯИ. Изучение и моделирование метода интеркалибровки переднего адронного калориметра CMS методом измерения потерь энергии.

2013-2014 г. Вычисление теоретических погрешностей для расчетов процессов рождения пары лептонов на данных эксперимента CMS в ходе первого (2010-2012 гг.) цикла работы LHC. Моделирование сигнальных событий множественного рождения струй при $\sqrt{s} = 8$ и 13 ТэВ в рамках моделей многомерной гравитации.

2015-2017 г. Неопределенности вычислений сечений Дрелла-Яна при энергии 13 ТэВ. Вычисление теоретических погрешностей для расчетов процессов рождения пары лептонов на данных эксперимента CMS в ходе второго цикла работы LHC. Измерение моментов распределения (CMD) по множественности заряженных частиц в струях и изучение зависимостей от различных параметров.

2018-2021 г. Получение в рамках теоретических сценариев многомерной низкоэнергетической гравитации (модель Рэндалл-Сандрума, тип 1 и модель Аркани-Хамеда-Димопулоса-Двали) предсказания для условий LHC по образованию черных дыр с минимальными массами M_{BH} на пороге включения многомерного режима (квантовый режим) с учетом возможного нарушения лептонного числа. Моделирование процессов LFV с учетом отклика установки CMS, реконструкция и анализ сигнальных событий.

Участие в оффлайн сменах контроля качества данных эксперимента CMS, с 2013 г. онлайн смены. С 2015 г. подключился к работам по проведению различных тестов и изучению эффектов старения мюонных камер ME2/1 и ME1/1 CMS на установке GIF++. Подготовке самой установки GIF++ для проведения сеансов. Изучение методов устранения эффекта Мальтера. Обработка полученных экспериментальных результатов.

Научные интересы: Научно-исследовательское программное обеспечение, контроль качества данных физических экспериментов, первичная обработка данных, калибровка детекторов, обработка данных физического эксперимента CMS, участие в рабочих сменах коллаборации. Моделирование сигнальных и фоновых процессов для изучения процессов множественного рождения частиц в многоструйных событиях и отбор подобных событий. Процессы Дрелла-Яна. Модели многомерной гравитации.

Научные труды:


- Публикации в зарубежных рецензируемых журналах, соавтор 460, автор 2-х статей;
- Международные устные доклады — 4;
- Международные секционные доклады — 2;
- Электронные публикации — 1;
- Препринты — 2;

Премии и награды:

Год	Наименование награды	Страна	Комментарий
2016	Стипендия имени Академика В. И. Векслера для молодых ученых ЛФВЭ.	РФ	Основная стипендия за цикл работ - "Изучение процессов множественного рождения лептонов и струй в эксперименте CMS на LHC".
2016	Премия ЛФВЭ по направлению "Экспериментальная и теоретическая физика частиц и ядер, проработка физической программы и моделирование процессов для комплекса NICA"	РФ	За цикл работ "Прецизионные измерения характеристик процессов Дрелла-Яна и поиск сигналов новой физики в эксперименте CMS на LHC"
2013	Премия Европейского физического сообщества в области физики высоких энергий и элементарных частиц (EPS HEPP Prize)	EU	За открытие новой тяжелой частицы со свойствами бозона Хиггса в составе членов коллабораций ATLAS и CMS
2012	Благодарственное письмо руководства коллаборации CMS	Швейцария	За открытие нового бозона с массой 125 ГэВ (в составе сотрудничества RDMS CMS)
2012	Премия ЛФВЭ по направлению "Экспериментальная и теоретическая физика частиц и ядер, проработка физической программы и моделирование процессов для комплекса NICA"	РФ	Обнаружение нового бозона с массой 125 ГэВ в эксперименте CMS на LHC

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Гавриленко М.Г.
13.07.2021

A handwritten signature in blue ink, appearing to be 'Mikhail Gavrilenko', written in a cursive style.

Гавриленко Михаил Григорьевич,

(ЛФВЭ - Отделение №4 Физики на встречных пучках - Научно-экспериментальный отдел физики на CMS - Сектор №1 новой физики на CMS, научный сотрудник)

Список научных работ

за период с 2018 по 2021гг. (данные на 13.07.2021)

Публикации в рецензируемых журналах (зарубежные):

1. Azimuthal anisotropy of charged particles with transverse momentum up to 100 GeV/c in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 776, 195-216, 2018
2. Measurements of tt-bar cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 776, 355-378, 2018
3. Suppression of Excited Upsilon States Relative to the Ground State in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 14, 142301, 2018
4. Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 778, 101-127, 2018
5. Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 167, 2018
6. Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 778, 263-291, 2018
7. Observation of the Higgs boson decay to a pair of tau leptons with the CMS detector
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 779, 283-316, 2018
8. Search for single production of a vector-like T quark decaying to a Z boson and a top quark in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 781, 574-600, 2018
9. Constraints on the chiral magnetic effect using charge-dependent azimuthal correlations in pPb and PbPb collisions at the LHC
CMS Collaboration (A. Sirunyan et al.), Physical Review C, Nuclear Physics, ISSN:0556-2813, eISSN:1089-490X, Изд:The American Physical Society, 97, 4, 044912, 2018

10. Search for vectorlike light-flavor quark partners in proton-proton collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 97, 7, 072008, 2018
11. Measurement of prompt D^0 meson azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 20, 202301, 2018
12. Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b}\ell\nu\ell\nu$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 01, 054, 2018
13. Nuclear modification factor of D^0 mesons in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 782, 474-496, 2018
14. Search for massive resonances decaying into WW , WZ , ZZ , qW , and qZ with dijet final states at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 97, 7, 072006, 2018
15. Measurement of normalized differential $t\bar{t}$ cross sections in the dilepton channel from pp collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 04, 060, 2018
16. Search for heavy resonances decaying to a top quark and a bottom quark in the lepton+jets final state in proton-proton collisions at 13 TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 777, 39-63, 2018
17. Measurement of the splitting function in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 14, 142302, 2018
18. Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 779, 166-190, 2018
19. Search for higgsino pair production in pp collisions at $\sqrt{s} = 13$ TeV in final states with large missing transverse momentum and two Higgs bosons decaying via H to $b\bar{b}$
CMS Collaboration (A. Sirunyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 97, 3, 032007, 2018
20. Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using ATLAS and CMS data at $\sqrt{s} = 7$ and 8 TeV

ATLAS and CMS Collaboration, Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 04, 033, 2018

21. Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 166, 2018

22. Inclusive search for a highly boosted Higgs boson decaying to a bottom quark-antiquark pair
CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 7, 071802, 2018

23. Observation of electroweak production of same-sign W boson pairs in the two jet and two same-sign lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 8, 081801, 2018

24. Evidence for the Higgs boson decay to a bottom quark-antiquark pair

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 780, 501-532, 2018

25. Measurements of the $pp \rightarrow ZZ$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 78, 2, 165, 2018

26. Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 076, 2018

27. Observation of correlated azimuthal anisotropy Fourier harmonics in pp and p+Pb collisions at the LHC

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 9, 092301, 2018

28. Search for supersymmetry in events with one lepton and multiple jets exploiting the angular correlation between the lepton and the missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 780, 384-409, 2018

29. Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 01, 097, 2018

30. Search for pair production of vector-like quarks in the $b W b\text{-bar} W$ channel from proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 779, 82-106, 2018

31. Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration (A. Sirunyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 78, 3, 242, 2018
32. Measurement of angular parameters from the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 781, 517-541, 2018
33. Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark final state in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 781, 244-269, 2018
34. Measurement of differential cross sections in the kinematic angular variable ϕ^* for inclusive Z boson production in pp collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 172, 2018
35. Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 02, 067, 2018
36. Measurement of b hadron lifetimes in pp collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration (A. Sirunyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 78, 6, 457, 2018
37. Pseudorapidity distributions of charged hadrons in proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ and 8.16 TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 01, 045, 2018
38. Search for gauge-mediated supersymmetry in events with at least one photon and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 780, 118-143, 2018
39. Search for pair production of excited top quarks in the lepton+jets final state
CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 778, 349-370, 2018
40. Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 06, 102, 2018
41. Search for new physics in final states with an energetic jet or a hadronically decaying W or Z boson and transverse momentum imbalance at $\sqrt{s} = 13$ TeV
CMS Collaboration (A. Sirunyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 97, 9,

092005, 2018

42. Measurement of the associated production of a single top quark and a Z boson in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 779, 358-384, 2018

43. Bose-Einstein correlations in pp, pPb, and PbPb collisions at $\sqrt{s_{NN}} = 0.9-7$ TeV

CMS Collaboration (A. Sirunyan et al.), Physical Review C, Nuclear Physics, ISSN:0556-2813, eISSN:1089-490X, Изд:The American Physical Society, 97, 6, 064912, 2018

44. Search for physics beyond the standard model in events with high-momentum Higgs bosons and missing transverse momentum in proton-proton collisions at 13 TeV

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 24, 241801, 2018

45. Search for R-parity violating supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV using b jets in a final state with a single lepton, many jets, and high sum of large-radius jet masses

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 783, 114-139, 2018

46. Electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 78, 07, 589, 2018

47. Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 05, 127, 2018

48. Search for new physics in events with two soft oppositely charged leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 782, 440-467, 2018

49. Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 160, 2018

50. Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 06, 027, 2018

51. Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 181, 2018

52. Search for lepton-flavor violating decays of heavy resonances and quantum black holes to e mu

final states in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 04, 073, 2018

53. Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in final states with jets and missing transverse momentum

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 05, 025, 2018

54. Search for heavy neutral leptons in events with three charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 22, 221801, 2018

55. Search for narrow resonances in the b-tagged dijet mass spectrum in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 120, 201801, 2018

56. Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 05, 088, 2018

57. Jet properties in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 05, 006, 2018

58. Search for a heavy resonance decaying into a Z boson and a vector boson in the $\nu \bar{\nu} q \bar{q}$ final state

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Монографии, главы в монографиях (новые):

1. 9789290835677 9789290834663

*The Phase-2 Upgrade of the CMS Level-1 Trigger Technical Design Report, 374, CMS
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A handwritten signature in blue ink, located in the upper right quadrant of the page. The signature is stylized and appears to be a name followed by a surname or initials, though the specific characters are difficult to discern due to the cursive style.