

Директору ОИЯИ
академику РАН Г.В.Трубникову
от Жижина Илья Александровича,
МНС, Сектор №1 новой физики на CMS,
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ЗАЯВЛЕНИЕ

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

Научного сотрудника Сектора №1 новой физики на CMS, Научно-экспериментального отдела
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(название должности, сектора, отдела, отделения, лаборатории)

13.08.2024



Личная подпись, дата

Научная биография (Curriculum Vitae)

Младший научный сотрудник, сектора №1 новой физики на CMS, НЭОФCMS, ЛФВЭ
(название занимаемой должности, отдела, сектора, отделения, лаборатории)


Жижин Илья Александрович
(Ф.И.О.)

- * **ФИО**
Жижин Илья Александрович;
- * **Дата и место рождения:**
7 декабря 1993 г., Удмуртская республика, г. Сарапул;
- * **Образование, научные степени, звание:**
Высшее образование.
2012 – 2016 – бакалавриат, Государственный университет Дубна, кафедра физики.
2016 – 2018 – магистратура, Государственный университет Дубна, кафедра ядерной физики.
2018 – 2022 – аспирантура, Государственный университет Дубна, Биологические науки.
- * **Профессиональная научная деятельность (по годам); указать темы по Проблемно-тематическому плану ОИЯИ, в которых Вы участвуете:**
2014 – 2016 – лаборант в Лаборатории теоретической физики им. Н.Н. Боголюбова
07/2014, 02/2015, 07/2015 – стажировки в Лаборатории физики низких температур, Карлов университет, Прага, Чешская республика.
2016 – 2019 – лаборант в Лаборатории физики высоких энергий им. В.И. Векслера и А.М. Балдина.
2019 – 2021 – инженер в Лаборатории физики высоких энергий им. В.И. Векслера и А.М. Балдина.
2021 – настоящее время – МНС в Лаборатории физики высоких энергий им. В.И. Векслера и А.М. Балдина.
CMS. Компактный мюонный соленоид на LHC, 02-1-1083-2009
- * **Научные интересы:**
Физика элементарных частиц и высоких энергий;
Поиск новых нейтральных калибровочных бозонов в эксперименте CMS на LHC в рамках моделей расширенного калибровочного сектора (РКС), сценариев с дополнительными пространственными измерениями (ДПИ), темной материи и др.;
Анализ экспериментальных данных и модификация алгоритмов и критериев отбора событий;
Монте-Карло моделирование физических процессов рождения пар мюонов в рамках Стандартной модели (процесс Дрелла-Яна), моделирования фоновых событий, связанных с рождением пар мюонов во взаимодействиях фотонов (photon induced background) и расчет сечения этих процессов с использованием программных пакетов генераторов физических событий Pythia8, POWHEG, FEWZ, DYTurbo.

* **Научные труды (указать общее количество научных работ, изобретений):**
245 публикаций в рецензируемых журналах, в том числе в соавторстве коллаборации CMS.

- * **Премии и награды:**
- Первая премия конкурса работ, выполненных в 2021 г. в ЛФВЭ;
 - Лауреат конкурса по отбору наиболее востребованных молодых учёных и специалистов подпрограммы "Социальная ипотека" государственной программы Московской области "Жилище" 2021;
 - Грант ОМУС ОИЯИ 22-102-05, 2022.

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06.08.2024
 Личная подпись и дата

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Список научных работ

за период с 2021 по 2024гг. (данные на 06.08.2024)

Публикации в рецензируемых журналах (зарубежные):

1. Measurement of the CP-violating phase ϕ_s in the $B_s^0 \rightarrow J/\psi\phi(1020) \rightarrow \mu^+ \mu^- K^+ K^-$ channel 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, 816, 136188, 2021
2. Search for the lepton flavor violating decay $\tau \rightarrow 3\mu$ 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, 163, 2021
3. Search for dark matter produced in association with a leptonically decaying 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, 81, 1, 13, 2021
4. Search for top squark pair production using dilepton final states in pp collision data collected 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, 81, 1, 3, 2021
5. Evidence for electroweak production of four charged leptons and two jets 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, 812, 135992, 2021
6. Measurements of $pp \rightarrow ZZ$ production cross sections 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, 81, 3, 200, 2021
7. Evidence for Higgs boson decay to a pair of muons
CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 01, 148, 2021
8. Search for dark photons in Higgs boson production via vector boson fusion 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, 011, 2021
9. Angular analysis of the decay $B^+ \rightarrow K^*(892)^+ \mu^+ \mu^-$ in proton-proton 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, 04, 124, 2021
10. The very forward CASTOR calorimeter of the CMS experiment
CMS Collaboration (V. Khachatryan et al.), Journal of Instrumentation, ISSN:1748-0221, Изд:IOP Publishing Limited, 16, 02, P02010, 2021
11. Observation of forward neutron multiplicity dependence of dimuon acoplanarity in ultraperipheral 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, 127, 12, 122001, 2021
12. Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons 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, 257, 2021
13. Measurement of the Z boson differential production cross section using its invisible decay mode ($Z \rightarrow \nu\bar{\nu}$) 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, 205, 2021

14. First measurement of the cross section for top quark pair production with additional charm jets using dileptonic 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, 820, 136565, 2021

15. In-medium modification of dijets in 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, 05, 116, 2021

16. Measurements of the differential cross sections of the production of Z+jets and γ +jets and of Z boson emission collinear with a jet 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, 05, 285, 2021

17. Measurement of the $W\gamma$ production cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on effective field theory coefficients

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 126, 25, 252002, 2021

18. Observation of a new excited beauty strange baryon decaying to $\Xi_b^- \pi^+ \pi^-$

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 126, 25, 252003, 2021

19. Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of Instrumentation, ISSN:1748-0221, Изд:IOP Publishing Limited, 16, 07, P07001, 2021

20. Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions 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, 104, 3, 032006, 2021

21. Study of Drell-Yan dimuon production in proton-lead collisions at $\sqrt{s_{NN}} = 8.16$ TeV

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 05, 182, 2021

22. Search for top squark production in fully hadronic final states in proton-proton collisions 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, 104, 5, 052001, 2021

23. Search for resonant and nonresonant new phenomena in high-mass dilepton final states 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, 07, 208, 2021

24. Measurements of production cross sections of the Higgs boson in the four-lepton final state 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, 81, 6, 488, 2021

25. Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel 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, 07, 027, 2021

26. Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z-Boson Yields and Azimuthal Anisotropy 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, 127, 10, 102002, 2021

27. Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS

CMS Collaboration (A. Sirunyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044,

eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 81, 9, 800, 2021

28. Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs 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, 81, 8, 723, 2021

29. Search for W' bosons decaying to a top and a bottom quark at $\sqrt{s} = 13$ TeV in the hadronic final state

CMS Collaboration (A. Sirunyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 820, 136535, 2021

30. Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state

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, 104, 5, 052004, 2021

31. Search for a heavy resonance decaying to a top quark and a W boson at $\sqrt{s} = 13$ TeV in the fully hadronic final state

CMS Collaboration (A. Sirunyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 12, 106, 2021

32. Search for long-lived particles decaying to jets with displaced vertices in proton-proton collisions 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, 104, 5, 052011, 2021

33. Search for lepton-flavor violating decays of the Higgs boson in the $\mu\tau$ and $e\tau$ final states in proton-proton collisions 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, 104, 3, 032013, 2021

34. Measurements of the $pp \rightarrow W^\pm \gamma\gamma$ and $pp \rightarrow Z\gamma\gamma$ cross sections at $\sqrt{s} = 13$ TeV and limits on anomalous quartic gauge couplings

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 10, 174, 2021

35. Study of Z boson plus jets events using variables sensitive to double-parton scattering in pp collisions at 13 TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 10, 176, 2021

36. Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\tau\tau b\bar{b}$ final state at 13 TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 11, 057, 2021

37. Measurement of the electroweak production of $Z\gamma$ and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on anomalous quartic gauge couplings

CMS Collaboration (A. Tumasyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 104, 7, 072001, 2021

38. Measurements of the electroweak diboson production cross sections in proton-proton collisions at $\sqrt{s} = 5.02$ TeV using leptonic decays

CMS Collaboration (A. Tumasyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 127, 19, 191801, 2021

39. Measurement of the inclusive and differential $t\text{--}\bar{t}\gamma$ cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 12, 180, 2021

40. Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 127, 26, 261804, 2021

41. Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 81, 11, 970, 2021

42. Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb^{-1} of proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 10, 045, 2021

43. Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 11, 153, 2021

44. Measurement of differential $t\text{-}\bar{t}$ production cross sections in the full kinematic range using lepton+jets events from proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 104, 9, 092013, 2021

45. Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 12, 161, 2021

46. Observation of tW production in the single-lepton channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 11, 111, 2021

47. Search for a high-mass dark matter mediator decaying to dilepton final state in the CMS experiment at the LHC

A.B.Ланёв, С.В.Шматов, И.А.Жижин, AIP Conference Proceedings, ISSN:0094-243X, eISSN:1551-7616, Изд:American Institute of Physics, 2021

48. Probing effective field theory operators in the associated production of top quarks with a Z boson in multilepton final states at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (N. Tonon et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 12, 083, 2021

49. Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions

CMS Collaboration (A. Sirunyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 128, 12, 122301, 2022

50. Search for $W\gamma$ resonances in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ using hadronic decays of Lorentz-boosted W bosons

CMS Collaboration (A. Tumasyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 826, 136888, 2022

51. Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 825, 136842, 2022

52. Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 04, 147, 2022

53. Measurement of the inclusive and differential Higgs boson production cross sections in the decay mode to a pair of τ leptons in pp collisions at $\sqrt{s} = 13 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 128, 8, 081805, 2022

54. Observation of B_s^0 mesons and measurement of the B_s^0/B^+ yield ratio in PbPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$

CMS Collaboration (A. Tumasyan et al.), Physics Letters B, ISSN:0370-2693, eISSN:1873-2445, Изд:Elsevier Science Limited, 829, 137062, 2022

55. Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479,

Изд:Springer Berlin Heidelberg, 01, 188, 2022

56. Search for heavy resonances decaying to WW, WZ, or WH boson pairs in a final state consisting of a lepton and a large-radius jet in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 105, 3, 032008, 2022

57. Search for heavy resonances decaying to $Z(\nu\text{-}\nu)V(q\text{-}q')$ in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Physical Review D, covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 106, 1, 012004, 2022

58. Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 01, 177, 2022

59. Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 82, 2, 153, 2022

60. 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

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 06, 012, 2022

61. Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 07, 032, 2022

62. Search for long-lived particles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 160, 2022

63. Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), The European Physical Journal C - Particles and Fields, ISSN:1434-6044, eISSN:1434-6052, Изд:Springer Berlin Heidelberg, 82, 4, 290, 2022

64. 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 $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Physical Review Letters, ISSN:0031-9007, eISSN:1079-7114, Изд:The American Physical Society, 129, 3, 032001, 2022

65. Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 02, 107, 2022

66. A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s} = 13$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of Instrumentation, ISSN:1748-0221, Изд:IOP Publishing Limited, 17, 03, P03014, 2022

67. Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV

CMS Collaboration (A. Tumasyan et al.), Journal of High Energy Physics, ISSN:1126-6708, eISSN:1029-8479, Изд:Springer Berlin Heidelberg, 03, 189, 2022

68. 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

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CMS Collaboration, 318, CERN-LHCC-2021-008; CMS-TDR-023; 1 July 2021, 2021

06.08.2024

