

№	Авторы организации	ВСЕ авторы	Название публикации	Название источника	Источник:	DOI (Digital Object Identifier):
13	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Luminosity determination using Z boson production at the CMS experiment	The European Physical Journal C	Eur. Phys. J. C 84 (2024) 26	10.1140/epjc/s10052-023-12268-2
14	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for inelastic dark matter in events with two displaced muons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 132 (2024) 4, 041802	10.1103/PhysRevLett.132.041802
11	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of the production cross section for a W boson in association with a charm quark in proton-proton collisions at $\sqrt{s}=13$ TeV	The European Physical Journal C	Eur. Phys. J. C 84 (2024) 27	10.1140/epjc/s10052-023-12258-4
12	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Evidence for the Higgs boson decay to a Z boson and a photon at the LHC	Physics Review Letters	Phys. Rev. Lett. 132 (2024) 021803	10.1103/PhysRevLett.132.021803
13	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of the \square lepton polarization in Z boson decays in proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	JHEP 01 (2024) 101	10.1007/JHEP01(2024)101
14	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Study of charm hadronization with prompt Λc^+ baryons in proton-proton and lead-lead collisions at $\sqrt{s_{NN}}=5.02$ TeV	Journal of High Energy Physics	JHEP 01 (2024) 128	10.1007/JHEP01(2024)128
15	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for scalar leptoquarks produced via \square -lepton-quark scattering in pp collisions at $\sqrt{s}=13$ TeV	Physics Review Letters	Phys. Rev. Lett. 132 (2024) 061801	10.1103/PhysRevLett.132.061801
25	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Letters B	Phys. Lett. B 850 (2024) 138478	10.1016/j.physletb.2024.138478
26	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Higher-order moments of the elliptic flow distribution in PbPb collisions at $\sqrt{s} = 5.02$ TeV	JHEP	JHEP 02 (2024) 106	10.1007/JHEP02(2024)106

13	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for flavor changing neutral current interactions of the top quark in final states with a photon and additional jets in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 109, 072004	10.1103/PhysRevD.109.072004
14	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for supersymmetry in final states with disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 109, 072007	10.1103/PhysRevD.109.072007
15	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for long-lived heavy neutral leptons with lepton flavour conserving or violating decays to a jet and a charged lepton	Journal of High Energy Physics	JHEP03(2024)105	10.1007/JHEP03(2024)105
16	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for dark matter particles in $W+W^-$ events with transverse momentum imbalance in proton-proton collisions at $= 13$ TeV	Journal of High Energy Physics	JHEP03(2024)134	10.1007/JHEP03(2024)134
17	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of $WW\gamma$ Production and Search for $H\gamma$ Production in Proton-Proton Collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 132 (2024) 121901	10.1103/PhysRevLett.132.121901
18	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Study of azimuthal anisotropy of $\Upsilon(1S)$ mesons in pPb collisions at $\sqrt{s_{NN}}= 8.16$ TeV	Physics Letters B	Phys. Lett. B 850 (2024) 138518	10.1016/j.physletb.2024.138518
19	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Muon identification using multivariate techniques in the CMS experiment in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of Instrumentation	2024 JINST 19 P02031	10.1088/1748-0221/19/02/P02031
20	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of the Higgs boson production via vector boson fusion and its decay into bottom quarks in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	JHEP01(2024)173	10.1007/JHEP01(2024)173

21	G. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Physical Review C	Phys. Rev. C 109, 024914	10.1103/PhysRevC.109.024914
22	G. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	New Structures in the J/ψ / J/ψ Mass Spectrum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 132, 111901	10.1103/PhysRevLett.132.111901
23	G. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurements of azimuthal anisotropy of nonprompt D^0 mesons in PbPb collisions at $\sqrt{s_{NN}} = 5.0$ TeV	Physics Letters B	Phys. Lett. B 850 (2024) 138389	10.1016/j.physletb.2023.138389
6	V. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for W' bosons decaying to a top and a bottom quark in leptonic final states in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	JHEP 05 (2024) 046	10.1007/JHEP05(2024)046
7	V. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for an exotic decay of the Higgs boson into a Z boson and a pseudoscalar particle in proton-proton collisions at $\sqrt{s}=13$ TeV	Physics Letters B	Phys. Lett. B 852 (2024) 138582	10.1016/j.physletb.2024.138582
8	V. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for exotic decays of the Higgs boson to a pair of pseudoscalars in the $\gamma\gamma b\bar{b}$ and $\gamma\gamma\tau\bar{\tau}$ final states	European Physics Journal C	Eur. Phys. J. C 84 (2024) 493	10.1140/epjc/s10052-024-12727-4
9	V. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for long-lived particles decaying to final states with a pair of muons in proton-proton collisions at $\sqrt{s}=13.6$ TeV	Journal of High Energy Physics	JHEP 05 (2024) 047	10.1007/JHEP05(2024)047
38	G. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of the $J/\psi \rightarrow \psi^+\psi^-\psi^+\psi^-$ decay in proton-proton collisions at $\sqrt{s}=13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) L111101	10.1103/PhysRevD.109.L111101
39	G. Gavrilov, V. Golovtcov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for long-lived particles using displaced vertices and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) 112005	10.1103/PhysRevD.109.112005

40	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for pair production of scalar and vector leptoquarks decaying to muons and bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) 112003	10.1103/PhysRevD.109.112003
41	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Combined search for electroweak production of winos, binos, higgsinos, and sleptons in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) 112001	10.1103/PhysRevD.109.112001
42	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for Baryon Number Violation in Top Quark Production and Decay Using Proton-Proton Collisions at $\sqrt{s} = 13$ TeV	Physics Review Letters	Phys. Rev. Lett. 132, 241802	10.1103/PhysRevLett.132.241802
43	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Nonresonant central exclusive production of charged-hadron pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) 112013	10.1103/PhysRevD.109.112013
44	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for the lepton flavor violating $\mu \rightarrow 3e$ decay in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Letters B	Physics Letters B 853 (2024) 138633	10.1016/j.physletb.2024.138633
45	G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for stealth supersymmetry in final states with two photons, jets, and low missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Review D	Phys. Rev. D 109 (2024) 112009	10.1103/PhysRevD.109.112009
7	G. Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Combination of measurements of the top quark mass from data collected by the ATLAS and CMS experiments at $\sqrt{s} = 7$ and 8 TeV	Physical Review Letters	Phys. Rev. Lett. 132 (2024) 261902	10.1103/PhysRevLett.132.261902
8	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for ZZ and ZH production in the $b\bar{b}b\bar{b}$ final state using proton-proton collisions at $\sqrt{s} = 13$ TeV	European Physical Journal C	Eur. Phys. J. C 84, 712 (2024)	10.1140/epjc/s10052-024-13021-z
9	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for the decay of the Higgs boson to a pair of light pseudoscalar bosons in the final state with four bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 97 (2024)	10.1007/JHEP06(2024)097

10	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for long-lived heavy neutrinos in the decays of B mesons produced in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 183 (2024)	10.1007/JHEP06(2024)183
11	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for heavy neutral leptons in final states with electrons, muons, and hadronically decaying tau leptons in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 123 (2024)	10.1007/JHEP06(2024)123
12	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for long-lived heavy neutral leptons decaying in the CMS muon detectors in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 110, 012004	10.1103/PhysRevD.110.012004
13	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Observation of the $\Xi^- \rightarrow \Xi(2S)\Xi^-$ decay and studies of the $\Xi_b(5945)0$ baryon in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 110, 012002	10.1103/PhysRevD.110.012002
14	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Test of lepton flavor universality in $B^\pm \rightarrow K^\pm \mu^+ \mu^-$ and $B^\pm \rightarrow K^\pm e^+ e^-$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV	Reports on Progress in Physics	Rep. Prog. Phys. 87 077802	10.1088/1361-6633/ad4e65
15	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Extracting the speed of sound in quark-gluon plasma with ultrarelativistic lead-lead collisions at the LHC	Reports on Progress in Physics	Rep. Prog. Phys. 87 077801	10.1088/1361-6633/ad4b9b
16	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Measurement of the primary Lund jet plane density in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 116 (2024)	10.1007/JHEP05(2024)116
17	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Measurement of simplified template cross sections of the Higgs boson produced in association with W or Z bosons in the $H \rightarrow b\bar{b}$ decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 109, 092011	10.1103/PhysRevD.109.092011

18	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for central exclusive production of top quark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV with tagged protons	Journal of High Energy Physics	J. High Energ. Phys. 2024, 187 (2024)	10.1007/JHEP06(2024)187
19	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for a new resonance decaying into two spin-0 bosons in a final state with two photons and two bottom quarks in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 316 (2024)	10.1007/JHEP05(2024)316
20	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Inclusive and differential cross section measurements of $t\bar{t}b\bar{b}$ production in the lepton+jets channel at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 42 (2024)	10.1007/JHEP05(2024)042
21	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Development of the CMS detector for the CERN LHC Run 3	Journal of Instrumentation	2024 JINST 19 P05064	10.1088/1748-0221/19/05/P05064
22	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for a third-generation leptoquark coupled to a τ lepton and a b quark through single, pair, and nonresonant production in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024, 311 (2024)	10.1007/JHEP05(2024)311
23	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Observation of the $Y(3S)$ meson and suppression of Y states in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Physical Review Letters	Phys. Rev. Lett. 133, 022302	10.1103/PhysRevLett.133.022302
21	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Search for long-lived particles decaying in the CMS muon detectors in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 110, 032007	10.1103/PhysRevD.110.032007
22	Gavrilov G., Golovtcov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Measurement of multijet azimuthal correlations and determination of the strong coupling in proton-proton collisions at $\sqrt{s}=13$ TeV	European Physical Journal C	Eur. Phys. J. C 84 (2024) 842	10.1140/epjc/s10052-024-13116-7

23	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Constraints on anomalous Higgs boson couplings from its production and decay using the WW channel in proton-proton collisions at $\sqrt{s} = 13$ TeV	European Physical Journal C	Eur. Phys. J. C 84 (2024) 779	10.1140/epjc/s10052-024-12925-0
24	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Measurement of energy correlators inside jets and determination of the strong coupling $\alpha_s(\mu_Z)$	Physical Review Letters	Phys. Rev. Lett. 133 (2024) 071903	10.1103/PhysRevLett.133.071903
25	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Evidence for tWZ production in proton-proton collisions at $\sqrt{s} = 13$ TeV in multilepton final states	Physics Letters B	Phys. Lett. B 855 (2024) 138815	10.1016/j.physletb.2024.138815
12	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Multiplicity and transverse momentum dependence of charge-balance functions in pPb and PbPb collisions at LHC energies	Journal of High Energy Physics	JHEP 08 (2024) 148	10.1007/JHEP08(2024)148
1	Gavrilov G., Golovtsov V., Ivanov Y., Kim V., Levchenko P., Murzin V., Oreshkin V., Sosnov D., Sulimov V., Uvarov L., Vorobyev A.	CMS Collaboration	Measurement of the production cross section of a Higgs boson with large transverse momentum in its decays to a pair of τ leptons in proton-proton collisions at 13 TeV	Physics Letters B	Physics Letters B 857 (2024) 138964	10.1016/j.physletb.2024.138964
27	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Searches for violation of Lorentz invariance in $t\bar{t}$ production using dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physics Letters B	Physics Letters B 857 (2024) 138979	10.1016/j.physletb.2024.138979
28	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	$K_{S^*}^0$ and $\Lambda(\Lambda^*)$ two-particle femtoscopic correlations in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV	Physics Letters B	Physics Letters B 857 (2024) 138936	10.1016/j.physletb.2024.138936
29	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for a resonance decaying to a W boson and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV using leptonic W boson decays	Journal of High Energy Physics	JHEP 09 (2024) 186	10.1007/JHEP09(2024)186
30	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Portable Acceleration of CMS Computing Workflows with Coprocessors as a Service	Computing and Software for Big Science	Comput Softw Big Sci 8 (2024) 17	10.1007/s41781-024-00124-1

31	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of $\gamma\gamma\rightarrow\tau\tau$ in proton-proton collisions and limits on the anomalous electromagnetic moments of the τ lepton	Reports on Progress in Physics	Rep. Prog. Phys. 87 (2024) 107801	10.1088/1361-6633/ad6feb
32	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Performance of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s}=13$ TeV	Journal of Instrumentation	JINST 19 (2024) P09004	10.1088/1748-0221/19/09/P09004
33	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Performance of CMS muon reconstruction from proton-proton to heavy ion collisions	Journal of Instrumentation	JINST 19 (2024) P09012	10.1088/1748-0221/19/09/P09012
34	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	A search for bottom-type vector-like quark pair production in dileptonic and fully hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 110 (2024) 052004	10.1103/PhysRevD.110.052004
35	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of enhanced long-range elliptic anisotropies inside high-multiplicity jets in pp collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 133 (2024) 142301	10.1103/PhysRevLett.133.142301
1	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of the polarizations of prompt and non-prompt J/ψ and $\psi(2S)$ mesons produced in pp collisions at $\sqrt{s}=13$ TeV	Physics Letters B	Physics Letters B 858 (2024) 139044	10.1016/j.physletb.2024.139044
13	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of the $\Lambda^0_b \rightarrow J/\psi \Xi^{*-} K^{*+}$ decay	The European Physical Journal C	Eur. Phys. J. C 84 (2024) 1062	10.1140/epjc/s10052-024-13114-9
14	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for Higgs boson pair production with one associated vector boson in proton-proton collisions at $\sqrt{s}=13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 61	10.1007/JHEP10(2024)061
15	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for the Z Boson Decay to $\mu\mu\mu$ in Proton-Proton Collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 133 (2024) 161805	10.1103/PhysRevLett.133.161805
16	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for production of a single vectorlike quark decaying to $t\bar{H}$ or tZ in the all-hadronic final state in pp collisions at $\sqrt{s}=13$ TeV	Physical Review D	Phys. Rev. D 110 (2024) 072012	10.1103/PhysRevD.110.072012

17	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of quantum entanglement in top quark pair production in proton-proton collisions at $\sqrt{s} = 13$ TeV	Reports on Progress in Physics	Rep. Prog. Phys. 87 (2024) 117801	10.1088/1361-6633/ad7e4d
9	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Performance of the CMS high-level trigger during LHC Run 2	Journal of Instrumentation	JINST 19 (2024) P11021	10.1088/1748-0221/19/11/P11021
10	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Observation of double J/ψ meson production in p Pb collisions at $\sqrt{s_{NN}}=8.16$ TeV	Physical Review D	Phys. Rev. D 110 (2024), 092002	10.1103/PhysRevD.110.092002
11	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for dark QCD with emerging jets in proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 142	10.1007/JHEP07(2024)142
12	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	The CMS statistical analysis and combination tool: Combine	Computing and Software for Big Science	Comp. Softw. Big Sci. 8 (2024) 19	10.1007/s41781-024-00121-4
13	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Searches for Pair-Produced Multijet Resonances Using Data Scouting in Proton-Proton Collisions at $\sqrt{s}=13$ TeV	Physical Review Letters	Phys. Rev. Lett. 133 (2024) 201803	10.1103/PhysRevLett.133.201803
14	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for soft unclustered energy patterns in proton-proton collisions at 13 TeV	Physical Review Letters	Phys. Rev. Lett. 133 (2024), 191902	10.1103/PhysRevLett.133.191902
17	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for Higgs boson pair production in the $b\bar{b}W^+W^-$ decay mode in proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 293	10.1007/JHEP07(2024)293
18	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for new physics in high-mass diphoton events from proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 215	10.1007/JHEP08(2024)215
19	G. GavriloV, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of differential $Z\gamma\gamma$ jets production cross sections in pp collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 209	10.1007/JHEP10(2024)209

20	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Measurement of the $B_{s^0} \rightarrow J/\psi K_{s^0}$ effective lifetime from proton-proton collisions at $\sqrt{s} = 13$ TeV	Journal of High Energy Physics	J. High Energ. Phys. 2024 (2024) 247	10.1007/JHEP10(2024)247
21	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for high-mass exclusive diphoton production with tagged protons in proton-proton collisions at $\sqrt{s} = 13$ TeV	Physical Review D	Phys. Rev. D 110 (2024) 012010	10.1103/PhysRevD.110.012010
22	G. Gavrilov, V. Golovtsov, Y. Ivanov V. Kim, P. Levchenko, V. Murzin, V. Oreshkin, D. Sosnov, V. Sulimov, L. Uvarov, A. Vorobyev	CMS Collaboration	Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark pair in multilepton events at $\sqrt{s} = 13$ TeV	Physical Review D	Phys. Rev. D 110 (2024) 012013	10.1103/PhysRevD.110.012013
15	Alkhazov G.	D0 Collaboration	Up and Down Quark Structure of the Proton	Physical Review D	Phys. Rev. D 110 (2024) 9, L091101	10.1103/PhysRevD.110.L091101
16	V.T. Kim	V.T. Kim	Higgs boson and naturalness domain in the standard model	AIP Conference Proceedings		10.1063/5.0192817
17	V.T. Kim	V.T. Kim	Higgs Boson and Naturalness Problem in the Standard Model	Physics of Particles and Nuclei		10.1134/S1063779624010088
24	Bulanova S.A., Kuznetsova E.V., Maleev V.P., Sosnov D.E., Zelenov A.V.	Bautin V.V., Bulanova S.A., Chukanov A.V., Enik T.L., Kuznetsova E.V., Maleev V.P., Mukhamejanova A.T., Salamatin K.M., Sosnov D.E., Zelenov A.V.	TIGER ASIC as a Candidate Front End Electronics Solution for Future Straw Trackers	Phys. Part. Nucl. Lett.	Phys. Part. Nucl. Lett. 21, 731-734 (2024)	10.1134/S1547477124701206