

ПОКАЗАТЕЛИ ЭФФЕКТИВНОСТИ
Лаборатории физики элементарных частиц
1 квартал 2021 г.

№ П/П	Название публикации (статьи, монографии, пособия и т.д.)	Авторы	Где опубликовано (название журнала, сборника, издательства и т.д.)
<i>Публикации Web of Science</i>			
1.	The very forward CASTOR calorimeter of the CMS experiment.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JINST</i> 16 (2021) 02, P02010
2.	Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 03 (2021) 011
3.	Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Lett.B</i> 812 (2021) 136018
4.	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Lett.B</i> 813 (2021) 136036
5.	Evidence for Higgs boson decay to a pair of muons.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 01 (2021) 148
6.	Measurements of $pp \rightarrow ZZ$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s}=13$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Eur.Phys.J.C</i> 81 (2021) 3, 200

7.	Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Lett.B</i> 812 (2021) 135992
8.	Search for top squark pair production using dilepton final states in pp collision data collected at $\sqrt{s}=13\text{TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Eur.Phys.J.C</i> 81 (2021) 1, 3
9.	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s}=13\text{TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Eur.Phys.J.C</i> 81 (2021) 1, 13
10.	Search for the lepton flavor violating decay $\tau \rightarrow 3\mu$ in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 01 (2021) 163
11.	Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at $\sqrt{s} = 13 \text{ TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 03 (2021) 003
12.	Correlations of azimuthal anisotropy Fourier harmonics with subevent cumulants in pPb collisions at $\sqrt{s_{NN}}=8.16\text{TeV}$.	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Rev.C</i> 103 (2021) 1, 014902
13.	Study of the normalized transverse momentum distribution of W bosons produced in $p\bar{p}$ collisions at $\sqrt{s}=1.96 \text{ TeV}$	The D0 Collaboration, ... G. Alkhazov, A. Lobodenko, P. Neustroev, Y. Scheglov, L. Uvarov, L. Uvarov et al.	<i>Phys.Rev.D</i> 103 (2021) 1, 012003

14.	Nuclear matter distributions in the neutron-rich carbon isotopes 14-17C from intermediate-energy proton elastic scattering in inverse kinematics	A.V. Dobrovolsky, G.A. Korolev, G.D. Alkhazov et al.	<i>Nucl. Phys. A</i> 1008 (2021) 122154

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<i>Публикации Web of Science</i>			
1	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	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys. Rev. D 104, 032013
2	Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys. Rev. D 104, 052004
3	Search for W' bosons decaying to a top and a bottom quark at $\sqrt{s}=13$ TeV in the hadronic final state	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Physics Letters B Volume 820, 10 September 2021, 136535
4	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	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Eur.Phys.J.C 81 (2021) 8, 723
5	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Eur.Phys.J.C 81 (2021) 9, 800
6	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	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Rev.Lett. 127 (2021) 10, 102002

7	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $s\sqrt{= 13 \text{ TeV}}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	JHEP 07 (2021) 027
8	Search for resonant and nonresonant new phenomena in high-mass dilepton final states at $s\sqrt{= 13 \text{ TeV}}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	JHEP 07 (2021) 208
9	Search for top squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s}=13 \text{ TeV}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Rev.D 104 (2021) 5, 052001
10	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $s\sqrt{=13\text{TeV}}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Eur.Phys.J.C 81 (2021) 8, 688
11	Hard color-singlet exchange in dijet events in proton-proton collisions at $\sqrt{s}=13 \text{ TeV}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Rev.D 104 (2021) 032009
12	Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at $\sqrt{s}=13 \text{ TeV}$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Rev.D 104 (2021) 3, 032006
13	Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s}=13$	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	JINST 16 (2021) P07001

14	First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at $s\sqrt{=} 13$ TeV	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Lett.B 820 (2021) 136565
15	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $s\sqrt{=} 13$ TeV	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Lett.B 819 (2021) 136446
16	Search for long-lived particles using displaced jets in proton-proton collisions at $s\sqrt{=} 13$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al. al.	Phys.Rev.D 104 (2021) 1, 012015
17	Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at $s\sqrt{=} 13$ TeV,	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Lett.B 819 (2021) 136409
18	Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Phys.Rev.Lett. 127 (2021) 12, 122001
19	MUSiC: a model-unspecific search for new physics in proton-proton collisions at $s\sqrt{=}13$ TeV.	The CMS collaboration., ... G. Gavrillov, V. Golovtcov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	Eur.Phys.J.C 81 (2021) 7, 629

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<i>Публикации Web of Science</i>			
1	Observation of $t\bar{t}$ production in the single-lepton channel in pp collisions at $s\sqrt{=}$ 13 TeV	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 11 (2021) 111
2	Measurement of differential $t\bar{t}$ production cross sections in the full kinematic range using lepton+jets events from proton-proton collisions at \sqrt{s} =13 TeV	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys. Rev. D</i> 104, 092013
3	Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at $s\sqrt{=}$ 13 TeV	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 11 (2021) 153
4	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $s\sqrt{=}$ 13TeV	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Eur.Phys.J.C</i> 81 (2021) 11, 970
5	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at \sqrt{s} =5.02 TeV Using Leptonic Decays	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Rev.Lett.</i> 127 (2021) 19, 191801
6	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	The CMS collaboration., ... G. Gavrilov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>Phys.Rev.D</i> 104 (2021) 072001

	gauge couplings	al.	
7	Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the $\tau b b$ final state at 13 TeV	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 11 (2021) 057
8	Study of Z boson plus jets events using variables sensitive to double-parton scattering in pp collisions at 13 TeV	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 10 (2021) 176
9	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	The CMS collaboration., ... G. Gavrillov, V. Golovtsov, Y. Ivanov, V. Kim, E. Kuznetsova, V. Murzin, V. Oreshkin, I. Smirnov, D. Sosnov, V. Sulimov, L. Uvarov, S. Volkov & A. Vorobyev, et al.	<i>JHEP</i> 10 (2021) 174
	Odderon Exchange from Elastic Scattering Differences between pp and $p\bar{p}$ Data at 1.96 TeV and from pp Forward Scattering Measurements.	The D0 collaboration., V. M. Abazov... G. D. Alkhazov, A. A. Lobodenko, et al.	<i>Phys. Rev. Lett.</i> 127, 062003 – Published 4 August 2021