

ПУБЛИКАЦИИ В ОФВЭ – 2019 ГОД

Публикации за 2019 год лаборатории физики элементарных частиц

1	Skewed Sudakov Regime, Harmonic Numbers, and Multiple Polylogarithms.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev. D99 (2019)
2	Inclusive search for supersymmetry in pp collisions at $s\sqrt{=}$ 13 TeV using razor variables and boosted object identification in zero and one lepton final states.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1903.
3.	Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1901.
4.	Search for long-lived particles decaying into displaced jets in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev. D99.
5.	Measurements of $t\bar{t}$ differential cross sections in proton-proton collisions at $s\sqrt{=}$ 13 TeV using events containing two leptons.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1902.
6.	Search for pair production of first-generation scalar leptoquarks at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko,	Phys.Rev. D99.

		V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	
7.	Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev. D99.
8.	Search for rare decays of Z and Higgs bosons to J/ψ and a photon in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Eur.Phys.J. C79.
9.	Search for pair-produced three-jet resonances in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev. D99.
10.	Observation of prompt J/ψ meson elliptic flow in high-multiplicity pPb collisions at $s\sqrt{NN}=\sqrt{=}$ 8.16 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B791.
11.	Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1902
12.	Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Eur.Phys.J. C79

13.	Search for pair production of second-generation leptoquarks at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev. D99.
14.	Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1901.
15.	Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1901.
16.	Search for narrow $H\gamma$ resonances in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev.Lett. 122.
17.	Search for dark matter particles produced in association with a top quark pair at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev.Lett. 122.
18.	Search for the Higgs boson decaying to two muons in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Rev.Lett. 122.
19.	Study of the underlying event in top quark pair production in pp collisions at 13 TeV .	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov,	Eur.Phys.J. C79.

		V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	
20.	Measurement of differential cross sections for inclusive isolated-photon and photon+jets production in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Eur.Phys.J. C79.
21.	Measurement of differential cross sections for Z boson pair production in association with jets at $s\sqrt{=}$ 8 and 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B789,
22.	Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1901.
23.	Search for supersymmetric partners of electrons and muons in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B790.
24.	Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B791.
25.	Search for Higgs boson pair production in the $\gamma\gamma b\bar{b}$ final state in pp collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B788.
26.	Measurement of nuclear modification factors of	S. Chatrchyan,... A.A. Vorobyov, V.L.	Phys.Lett. B790

	Y(1S), Y(2S), and Y(3S) mesons in PbPb collisions at $s\sqrt{NN} = 5.02$ TeV.	Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	
27.	Measurement of prompt $\psi(2S)$ production cross sections in proton-lead and proton-proton collisions at $s\sqrt{NN} = 5.02$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	Phys.Lett. B790.
28.	Search for $t\bar{t}$ H production in the $H \rightarrow b\bar{b}$ decay channel with leptonic $t\bar{t}$ decays in proton-proton collisions at $s\sqrt{NN} = 13$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, <i>et al.</i>	JHEP 1903.
29.	Search for CP violation through an amplitude analysis of $D^0 \rightarrow K^+ K^- \pi^+ \pi^-$ decays.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Shcheglov, A.A. Vorobyov, <i>et al.</i>	JHEP 1902.
30.	Measurement of the Charm-Mixing Parameter γ_{CP} .	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Shcheglov, A.A. Vorobyov, <i>et al.</i>	Phys.Rev.Lett. 122.
31.	Observation of Two Resonances in the $\Lambda^0 b \pi^\pm$ Systems and Precise Measurement of $\Sigma^\pm b$ and $\Sigma^* \pm b$ properties.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Shcheglov, A.A. Vorobyov, <i>et al.</i>	Phys.Rev.Lett. 122
32.	Prompt $\Lambda^+ c$ production in pPb collisions at $s\sqrt{NN} = 5.02$ TeV.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Shcheglov, A.A. Vorobyov, <i>et al.</i>	JHEP 1902.
33.	Observation of Two Excited B+c States and Measurement of the B+c(2S) Mass in pp Collisions at $s\sqrt{NN} = 13$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov,	Phys.Rev.Lett. 122.

		V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
34.	Search for W boson decays to three charged pions.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
35.	Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton–proton collisions at 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
36.	Measurements of the $pp \rightarrow WZ$ inclusive and differential production cross section and constraints on charged anomalous triple gauge couplings at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1904.
37.	Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. D99.
38.	Measurement of the top quark mass in the all-jets final state at $s\sqrt{=}$ 13 TeV and combination with the lepton+jets channel.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
39.	Measurement of the $t\bar{t}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
40.	Search for contact interactions and large extra	S. Chatrchyan, ... A.A. Vorobyov, V.L.	JHEP 1904.

	dimensions in the dilepton mass spectra from proton-proton collisions at $s\sqrt{=}$ 13 TeV.	Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
41.	Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
42.	Measurement and interpretation of differential cross sections for Higgs boson production at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B792.
43.	Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
44.	Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
45.	Measurement of inclusive very forward jet cross sections in proton-lead collisions at $s\sqrt{NN}=\sqrt{=}$ 5.02 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1905.
46.	Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $s\sqrt{=}$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov,	Phys.Rev. D99.

		An.A. Vorobyov, et al.	
47.	Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at $s\sqrt{=}$ 8 and 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B793.
48.	Search for excited leptons in $\ell\ell\gamma$ final states in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1904.
49.	Search for nonresonant Higgs boson pair production in the $bb\overline{bb}$ final state at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1904.
50.	Search for resonant $t\overline{t}$ production in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1904.
51.	Observation of prompt J/ψ meson elliptic flow in high-multiplicity pPb collisions at $s_{NN}\sqrt{=}$ 8.16 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B791.
52.	Combined measurements of Higgs boson couplings in proton-proton collisions at $s\sqrt{=}$ 13TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
53.	Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $s_{NN}\sqrt{=}$ 5.02 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko,	Phys.Rev.Lett. 122.

		V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
54.	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B793.
55.	Search for an $L\mu-L\tau$ gauge boson using $Z\rightarrow 4\mu$ events in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B792.
56.	Search for a W' boson decaying to a τ lepton and a neutrino in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B792.
57.	Observation of a narrow pentaquark state, $P_c(4312)^+$, and of two-peak structure of the $P_c(4450)^+$.	R. Aaij,... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
58.	Observation of an excited $B+c$ state.	R. Aaij,... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
59.	Search for lepton-universality violation in $B^+\rightarrow K+\ell+\ell^-$ decays.	R. Aaij,... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
60.	Observation of CP violation in charm decays.	R. Aaij,... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
61.	Measurement of the mass difference between neutral charm-meson eigenstates.	R. Aaij,... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.

62.	Search for CP violation in $D^+ \rightarrow K^0 S \pi^+$, $D^+ \rightarrow K^0 S K^+$ and $D^+ \rightarrow \phi \pi^+$ decays.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
63.	Dalitz plot analysis of the $D^+ \rightarrow K^- K^+ K^+$ decay.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	JHEP 1904.
64.	Observation of $B^0(s) \rightarrow J/\psi p \bar{p}$ decays and precision measurements of the $B^0(s)$ masses.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
65.	Observation of the doubly Cabibbo-suppressed decay $\Xi^+ c \rightarrow p \phi$.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	JHEP 1904.
66.	Model-Independent Observation of Exotic Contributions to $B^0 \rightarrow J/\psi K^+ \pi^-$ Decays.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
67.	Study of the $B^0 \rightarrow \rho(770) \rho(770) K^*(892) \rho(770)$ decay with an amplitude analysis of $B^0 \rightarrow (\pi^+ \pi^-) (K^+ \pi^-)$ decays.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	JHEP 1905.
68.	First Measurement of Charm Production in its Fixed-Target Configuration at the LHC.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev.Lett. 122.
69.	Measurement of the relative $B^- \rightarrow D^0 D^{*0} D^{*0} \mu^- \bar{\nu}_\mu$ branching fractions using B^- mesons from $B^- \rightarrow D^0 D^{*0} \mu^- \bar{\nu}_\mu$ decays.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, A.A. Vorobyov, et al.	Phys.Rev. D99.
70	Nuclear-matter distribution in the proton-rich nuclei ^7Be and ^8B from intermediate energy proton elastic Scattering in inverse kinematics	A.V. Dobrovolsky, G.A. Korelev, A.G. Inglessi, G.D. Alkhazov, G. Colo, I. Dillmann, P. Egelhof, A. Estrade, F. Farion, H. Geissel, S. Ilieva, Y. Ke, A.V. Khanzadeev, O.A. Kiselev, J. Kurcewicz, X.C. Le, Yu.A. Litvinov, G.E. Petrov, A. Prochazka, C. Scheidenberger, L.O. Sergeev, H. Simon, V. Takechi, S. Tang, V. Volkov, A.A. Vorobyev, H. Weick, V.I. Yatsoura	Nucl.Phys. A989 (2019) 40-58

71.	Properties of $Z\pm c(3900)$ produced in pp^- collision.	V.M. Abazov,... G.D. Alkhazov, A.A. Lobodenko, P.V. Neustroev, Yu.A. Scheglov, L.N. Uvarov, S.L. Uvarov, et al.	Phys.Rev. D100 (2019)
72.	Skewed Sudakov Regime at One Loop.	V.T. Kim, G.B. Pivovarov	Phys.Part.Nucl.Lett. 16 (2019).
73	QCD Asymptotics at Collider Energies.	V.T. Kim	Phys.Part.Nucl.Lett. 16.
	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B797 (2019)
74.	Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1908.
75.	Search for vector-like leptons in multilepton final states in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. D100.
76.	Search for a light charged Higgs boson decaying to a W boson and a CP-odd Higgs boson in final states with $e\mu\mu$ or $\mu\mu\mu$ in proton-proton collisions at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev.Lett. 123.
77.	Search for the production of $W\pm W\pm W^\mp$ events at $s\sqrt{=} 13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. D100.
78.	Performance of missing transverse momentum	S. Chatrchyan,... A.A. Vorobyov, V.L.	JINST 14.

	reconstruction in proton-proton collisions at $s\sqrt{=}$ 13 TeV using the CMS detector.	Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
79.	Search for charged Higgs bosons in the $H^\pm \rightarrow \tau^\pm\nu\tau$ decay channel in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1907.
80.	Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
81.	Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79
82.	Measurement of exclusive $\rho(770)0$ photoproduction in ultraperipheral pPb collisions at $s\sqrt{NN}=\sqrt{=}$ 5.02 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79.
83.	Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $s\sqrt{=}$ 13TeV.	Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B795.
84.	Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two muons and two b quarks in pp collisions at 13 TeV.	Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B795.
85.	A search for pair production of new light bosons	Kim, P.M. Levtchenko, V.A.Mursin, V.A.	Phys.Lett. B796.

	decaying into muons in proton-proton collisions at 13 TeV.	Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
86.	Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV.	Kim, P.M. Levchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B795.
87.	Observation of the $\Lambda_0 b \rightarrow \chi c 1(3872) p K^-$ decay.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	JHEP 1909.
88.	Measurement of CP observables in the process $B_0 \rightarrow DK^*0$ with two- and four-body D decays.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	JHEP 1909.
89.	Updated measurement of time-dependent $\{it CP\}$ -violating observables in $B_0 s \rightarrow J/\psi K^+ K^-$ decays.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Eur.Phys.J. C79.
90.	Precision measurement of the $\Lambda^+ c$, $\Xi^+ c$ and $\Xi^0 c$ baryon lifetimes.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Phys.Rev. D100.
91.	Amplitude analysis of the $B_0(s) \rightarrow K^*0 K^{\overline{}}^*0$ decays and measurement of the branching fraction of the $B_0 \rightarrow K^*0 K^{\overline{}}^*0$ decay.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	JHEP 1907.
92.	Measurement of CP-violating and mixing-induced observables in $B_0 s \rightarrow \phi \gamma$ decays.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Phys.Rev.Lett. 123
93.	First Observation of the Radiative Decay $\Lambda_0 b \rightarrow \Lambda \gamma$.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Phys.Rev.Lett. 123.
94.	Near-threshold $DD^{\overline{}}$ spectroscopy and observation of a new charmonium state.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	JHEP 1907.
95.	Measurements of CP asymmetries in charmless four-body $\Lambda_0 b$ and $\Xi^0 b$ decays.	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R.	Eur.Phys.J. C79.

		Sagidova, Yu.A. Vorobyov, et al.	
96.	Measurement of the CP-violating phase ϕ_s from $B^0_s \rightarrow J/\psi \pi^+ \pi^-$ decays in 13 TeV pp collisions.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Phys.Lett. B797.
97.	Measurement of b hadron fractions in 13 TeV pp collisions.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Phys.Rev. D100.
98.	Search for the rare decay $B^+ \rightarrow \mu^+ \mu^- \mu^+ \nu_\mu$.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, Yu.A. Vorobyov, et al.	Eur.Phys.J. C79
99.	Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A. Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1910 (2019)
100.	Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A. Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1910 (2019)
101.	Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A. Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79 (2019)
102.	Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $s\sqrt{=}$ 8 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A. Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79(2019)
103.	Measurement of the top quark polarization and $t\bar{t}$ spin correlations using dilepton final states in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A. Mursin, V.A. Oreshkin, I.B. Smirnov,	Phys.Rev. D100 (2019)

		V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
104.	Search for MSSM Higgs bosons decaying to $\mu+\mu^-$ in proton-proton collisions at $s\sqrt{=}$ 13 TeV Search for MSSM Higgs bosons decaying to $\mu + \mu^-$ in proton-proton collisions at $s=13$ TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B798 (2019).
105	Measurement of the top quark Yukawa coupling from $t\bar{t}$ kinematic distributions in the lepton+jets final state in proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. D100 (2019).
106.	Search for pair production of vectorlike quarks in the fully hadronic final state.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. D100 (2019).
107.	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B797 (2019).
108.	Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $s\sqrt{=}$ 13 TeV.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B797 (2019).
109.	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons.	S. Chatrchyan,... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B798 (2019)
110.	Search for Higgs and Z boson decays to J/ψ or Y	S. Chatrchyan,... A.A. Vorobyov, V.L.	Phys.Lett. B797 (2019).

	pairs in proton-proton collisions at $\sqrt{s}=13$ TeV Search for Higgs and Z boson decays to J/ψ or Y pairs in the four-muon final state in proton-proton collisions at $\sqrt{s}=13$ TeV.	Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	
111.	Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B798 (2019).
112.	Search for resonances decaying to a pair of Higgs bosons in the $b\bar{b} \rightarrow q\bar{q} \ell\nu$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	JHEP 1910 (2019).
113.	Search for new physics in top quark production in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Eur.Phys.J. C79 (2019)
114.	Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at $\sqrt{s_{NN}}=5.44$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Lett. B799 (2019).
115.	Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{NN}}=5.44$ TeV.	S. Chatrchyan, ... A.A. Vorobyov, V.L. Golovtsov, V.T. Kim, P.M. Levtchenko, V.A.Mursin, V.A. Oreshkin, I.B. Smirnov, V.V. Sulimov, L.N. Uvarov, S.A. Vavilov, An.A. Vorobyov, et al.	Phys.Rev. C100 (2019)
116.	Search for the doubly charmed baryon Ξ_{cc} .	R. Aaij, ... G.D. Alkhazov, N.F.Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al.	Sci.China Phys.Mech.Astron. 63
117.	Observation of New Resonances in the $\Lambda_0 b\pi+\pi^-$	R. Aaij, ... G.D. Alkhazov, N.F.Bondar,	Phys.Rev.Lett. 123 (2019)

	System.	A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al.	
118.	Search for the lepton-flavour-violating decays $B_0^s \rightarrow \tau \pm \mu \bar{\tau}$ and $B_0 \rightarrow \tau \pm \mu \bar{\tau}$	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al.	Phys.Rev.Lett. 123
119.	Search for the lepton-flavour-violating decays $B_0^s \rightarrow \tau \pm \mu \bar{\tau}$ and $B_0 \rightarrow \tau \pm \mu \bar{\tau}$.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al.	Phys.Rev.Lett. 123 (2019).
120	A search for $\Xi^{++cc} \rightarrow D^+ p K^- \pi^+$ decays.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al	JHEP 1910 (2019).
121.	Measurement of the CP-violating phase ϕ_s from $B_0^s \rightarrow J/\psi \pi^+ \pi^-$ decays in 13 TeV pp collisions.	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al	Phys.Lett. B797 (2019)
122	Measurements of CP asymmetries in charmless four-body Λ_0^b and Ξ_0^b decays	R. Aaij, ... G.D. Alkhazov, N.F. Bondar, A.A. Dzyuba, O.E. Maev, N.R. Sagidova, An.A. Vorobyov, et al	Eur.Phys.J. C79 (2019).
123.	Light front Hamiltonian for boson form of QED (1+1) in Pauli–Villars regularization	... M. Yu. Malyshev ...,	.Int. J. Mod. Phys. A, Vol. 34, No. 21, 1950113 (2019).
124.	Effective Hamiltonian for QCD on the Light Front	... M. Yu. Malyshev ...,	Physics of Particles and Nuclei Letters, 2019, Vol. 16, No. 5, pp. 533–536.
125.	<u>Electroweak Z Boson Production with Associated Hadronic Jets Measured by the CMS Collaboration at $\sqrt{s} = 13$ TeV</u>	V.A. Oreshkin	Physics of Particles and Nuclei Letters, 2019, Vol. 16, No. 5, pp. 463-468
126.	Dijets with Large Rapidity Separation at CMS	V.A. Murzin	Physics of Particles and Nuclei Letters, 2019, Vol. 16, No. 5, pp. 469-474
127..	Recent CMS and CMS-TOTEM results on diffraction	E.V. Kuznetsova	Proceedings of Science (PoS) October 2019, PoS DIS2019 v.352 (2019) 058, DOI: https://doi.org/10.22323/1.352.0058

Публикации Лаборатории релятивистской ядерной физики - 2019 год

№	Название публикации	Авторы	Где опубликовано
1	Study of J/ψ azimuthal anisotropy at forward rapidity in Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Коллаборация ALICE (...авторы из ПИЯФ : В.Иванов, Е.Крышень, А.Ханзадеев, М.Малаев, В.Никулин, В.Рябов, Ю.Рябов, В.Самсонов, М.Жалов.....)	JHEP 1902 (2019) 012
2	Event-shape engineering for the D-meson elliptic flow in mid-central Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Коллаборация ALICE	JHEP 1902 (2019) 150
3	Measuring K0K± interactions using pp collisions at $\sqrt{s}=7$ TeV	Коллаборация ALICE	Phys.Lett. B790 (2019) 22-34
4	Charged jet cross section and fragmentation in proton-proton collisions at $\sqrt{s} = 7$ TeV	Коллаборация ALICE	Phys.Rev. D99 (2019) no.1, 012016
5	Multiplicity dependence of light-flavor hadron production in pp collisions at $\sqrt{s} = 7$ TeV	Коллаборация ALICE	Phys.Rev. C99 (2019) no.2, 024906
6	Measurement of dielectron production in central Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV	Коллаборация ALICE	Phys.Rev. C99 (2019) no.2, 024002
7	p-p, p-Λ and Λ-Λ correlations studied via femtoscopy in pp reactions at $\sqrt{s} = 7$ TeV	Коллаборация ALICE	Phys.Rev. C99 (2019) no.2, 024001
8	Azimuthal Anisotropy of Heavy-Flavor Decay Electrons in p-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV	Коллаборация ALICE	Phys.Rev.Lett. 122 (2019) no.7, 072301
9	Suppression of Λ(1520) resonance production in central Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV	Коллаборация ALICE	Phys.Rev. C99 (2019) 024905
10	Y suppression at forward rapidity in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV	Коллаборация ALICE	Phys.Lett. B790 (2019) 89-101
11	Transverse momentum spectra and nuclear modification factors of charged particles in Xe-Xe collisions at $\sqrt{s_{NN}} = 5.44$ TeV	Коллаборация ALICE	Phys.Lett. B788 (2019) 166-179
12	Direct photon elliptic flow in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV	Коллаборация ALICE	Phys.Lett. B789 (2019) 308-322
13	Dielectron and heavy-quark production in inelastic and high-multiplicity proton-proton	Коллаборация ALICE	Phys.Lett. B788 (2019) 505-518

	collisions at $\sqrt{s_{NN}}=13\text{TeV}$		
14	Centrality and pseudorapidity dependence of the charged-particle multiplicity density in Xe–Xe collisions at $\sqrt{s_{NN}}=5.44\text{TeV}$	Коллаборация ALICE	Phys.Lett. B790 (2019) 35-48
15	Creating small circular, elliptical, and triangular droplets of quark-gluon plasma	Коллаборация PHENIX (..... авторы из ПИЯФ: Д.Иванищев, Д.Котов, Б.Комков, В.Рябов, Ю.Рябов, В.Самсонов, А.Ханзадеев.....)	Nature Phys. 15 (2019) no.3, 214-220
16	Multiparticle azimuthal correlations for extracting event-by-event elliptic and triangular flow in Au+Au collisions at $\sqrt{s_{NN}}=200\text{ GeV}$	Коллаборация PHENIX	Phys.Rev. C99 (2019) no.2, 024903
17	Direct photon production at low transverse momentum in proton-proton collisions at $\sqrt{s}=2.76$ and 8 TeV	Коллаборация ALICE	Phys.Rev. C99 (2019) no.2, 024912
18	Measurement of D^0, D^+, D^{*+} and D^+s production in pp collisions at $\sqrt{s}=5.02\text{ TeV}$ with ALICE	Коллаборация ALICE	Eur.Phys.J. C79 (2019) no.5, 388
19	Charged-particle pseudorapidity density at mid-rapidity in p-Pb collisions at $\sqrt{s_{NN}}=8.16\text{ TeV}$	Коллаборация ALICE	Eur.Phys.J. C79 (2019) no.4, 307
20	Λ_c production in Pb-Pb collisions at $\sqrt{s_{NN}}=5.02\text{ TeV}$	Коллаборация ALICE	Phys.Lett. B793 (2019) 212-223
21	Energy dependence of exclusive J/ψ photoproduction off protons in ultra-peripheral p–Pb collisions at $\sqrt{s_{NN}}=5.02\text{ TeV}$	Коллаборация ALICE	Eur.Phys.J. C79 (2019) no.5, 402
22	Analysis of the apparent nuclear modification in peripheral Pb–Pb collisions at 5.02 TeV	Коллаборация ALICE	Phys.Lett. B793 (2019) 420-432
23	Calibration of the photon spectrometer PHOS of the ALICE experiment	Коллаборация ALICE	JINST 14 (2019) no.05, P05025
24	Production of the $\rho(770)$ meson in pp and PbPb collisions at $\sqrt{s_{NN}}=2.76\text{ TeV}$	Коллаборация ALICE	Phys.Rev. C99 (2019) no.6, 064901
25	Measurements of $\mu\mu$ pairs from open heavy flavor and Drell-Yan in p+p collisions at $\sqrt{s}=200\text{ GeV}$	Коллаборация PHENIX	Phys.Rev. D99 (2019) no.7, 072003
26	Measurement of two-particle correlations with respect to	Коллаборация PHENIX	Phys.Rev. C99 (2019) no.5, 054903

	second and third order event planes in AuAu collisions at $\sqrt{s}=200$ GeV		
27	Measurement of charm and bottom production from semileptonic hadron decays in pp collisions at $\sqrt{sNN}=200$ GeV	Коллаборация PHENIX	Phys.Rev. D99 (2019) no.9, 092003
28	Nonperturbative transverse momentum broadening in dihadron angular correlations in $\sqrt{sNN}=200$ GeV proton-nucleus collisions	Коллаборация PHENIX	Phys.Rev. C99 (2019) no.4, 044912
29	Constraints on nuclear parton distributions from dijet photoproduction at the LHC	V. Guzey (Jyvaskyla U. & St. Petersburg, INP), M. Klasen (Munster U., ITP)	Eur.Phys.J. C79 (2019) no.5, 396
30	FCC-ee: The Lepton Collider : Future Circular Collider Conceptual Design Report Volume 2	Коллаборация FCC (...В.Гузей,...)	Eur.Phys.J.ST 228 (2019) no.2, 261-623
31	FCC Physics Opportunities: Future Circular Collider Conceptual Design Report Volume 1	FCC Collaboration (A. Abada ...В.Гузей... <i>et al.</i>)	Eur.Phys.J. C79 (2019) no.6, 474
32	Recent results from PHENIX	В.Г.Рябов	EPJ Web Conf. 204 (2019) 01017
33	Overview of ALICE results on ultra-peripheral collisions	Е.Крышень	EPJ Web Conf. 204 (2019)
34	Production of muons from heavy-flavour hadron decays in pp collisions at $\sqrt{s} = 5.02$ TeV	Коллаборация ALICE	JHEP 1908 (2019) 133
35	Measurement of the production of charm jets tagged with D0 mesons in pp collisions at $\sqrt{s}=7$ TeV	Коллаборация ALICE	JHEP 1908 (2019) 133
36	Measurement of jet radial profiles in Pb—Pb collisions at $\sqrt{sNN}= 2.76$ TeV	Коллаборация ALICE	Phys.Lett. B796 (2019) 204-219
37	First Observation of an Attractive Interaction between a Proton and a Cascade Baryon	Коллаборация ALICE	Phys.Rev.Lett. 123 (2019) no.11, 112002
38	One-dimensional charged kaon femtoscopy in p-Pb collisions at $\sqrt{sNN} = 5.02$ TeV	Коллаборация ALICE	Phys.Rev. C100 (2019) no.2, 024002
39	Multiplicity dependence of (anti-)deuteron production in pp collisions at $\sqrt{s} = 7$ TeV	Коллаборация ALICE	Phys.Lett. B794 (2019) 50-63
40	Real-time data processing in the ALICE High Level Trigger at the	Коллаборация ALICE	Comput.Phys.Commun . 242 (2019) 25-48

	LHC		
41	Nuclear-matter distribution in the proton-rich nuclei ^7Be and ^8B from intermediate energy proton elastic scattering in inverse kinematics	Dobrovolsky, A., Khanzadeev, A et al.	Nucl.Phys. A989 (2019) 40-58
42	Nuclear dependence of the transverse single-spin asymmetry in the production of charged hadrons at forward rapidity in polarized p+p, p+Al, and p+Au collisions at $\sqrt{s_{NN}}=200$ GeV	Коллаборация PHENIX	Phys.Rev.Lett. 123 (2019) no.12, 122001
43	Beam Energy and Centrality Dependence of Direct-Photon Emission from Ultrarelativistic Heavy-Ion Collisions	Коллаборация PHENIX	Phys.Rev.Lett. 123 (2019) no.2, 022301
44	HE-LHC: The High-Energy Large Hadron Collider Volume : Future Circular Collider Conceptual Design Report Volume 4	Коллаборация HE LHC (...В.Гузей,...)	Eur.Phys.J.ST 228 (2019) no.5, 1109-1382
45	FCC-hh: The Hadron Collider : Future Circular Collider Conceptual Design Report Volume 3	Коллаборация FCC (...В.,Гузей...)	Eur.Phys.J.ST 228 (2019) no.4, 755-1107
46	Heavy vector meson photoproduction in ultra-peripheral collisions at the LHC	Е.Крышень	Acta Physica Polonica {\bf B50} (2019) 1095
47	Dijet Photoproduction in Ultraperipheral Collisions at the LHC and Nuclear PDFs at Small x	V.Guzey	Physics of Particles and Nuclei Letters, 2019, Vol. 16, No. 5, pp. 498–502
48	Nucleon dissociation and incoherent J/ψ photoproduction on nuclei in ion ultraperipheral collisions at the Large Hadron Collider	V. Guzey (Jyvaskyla U. & Helsinki U. & St. Petersburg, INP), M. Strikman (Penn State U.), M. Zhalov (St. Petersburg, INP).	Phys.Rev. C99 (2019) no.1, 015201
49	Hypertriton and antihypertriton lifetime measurement in Pb-Pb collisions at $\sqrt{s_{NN}}= 5.02$ TeV via two-body decay	ALICE Collaboration	Phys.Lett. B797 (2019) 134905
50	Measurement of $Y(1S)$ elliptic flow at forward rapidity in Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	ALICE Collaboration	Phys.Rev.Lett. 123 (2019) 192301
51	Measurement of the inclusive isolated photon production cross section in pp collisions at $\sqrt{s_{NN}}=7$ TeV	ALICE Collaboration	Eur.Phys.J. C79 (2019) no.11, 896
52	Inclusive J/ψ production at mid-rapidity in pp collisions at 5.02	ALICE Collaboration	JHEP 1910 (2019) 084

	TeV		
53	Study of the $\Lambda\Lambda$ interaction with femtoscopy correlations in pp and p-Pb collisions at the LHC	ALICE Collaboration	Phys.Lett. B797 (2019) 134822
54	Charged-particle production as a function of multiplicity and transverse sphericity in pp collisions at $\sqrt{s}=5.02$ and 13 TeV	ALICE Collaboration	Eur.Phys.J. C79 (2019) no.10, 857
55	Coherent J/ψ photoproduction at forward rapidity in ultra-peripheral Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	ALICE Collaboration	Phys.Lett. B798 (2019) 134926
56	Investigation of anisotropic flow using multi-particle azimuthal correlations in pp , p-Pb, Xe-Xe and Pb-Pb collisions at the LHC	ALICE Collaboration	Phys.Rev.Lett. 123 (2019) no.14, 142301
57	Event reconstruction of free-streaming data for the RICH detector in the CBM experiment	J. Adamczewski-Musch (Darmstadt, GSI), (D. Ivanischev, L. Kochenda, P. Kravtsov, M. Malaev, N. Miftakhov, Y. Ryabov, E. Roshchin, V. Samsonov, O. Tarasenkova, M. Vznuzdaev (PNPI))	EPJ Web Conf. 214 (2019) 01043
58	Детекторная электроника мюонного спектрометра ALICE	В. Иванов, В. Н. Никулин, Е. В. Роцин, В. М. Самсонов, А. В. Ханзадеев	ПРИБОРЫ И ТЕХНИКА ЭКСПЕРИМЕНТА, 2019, №6, стр. 24-38
59	Measurement of the neutral and charged K^* (892) mesons in the MPD experiment at NICA	Dmitry Ivanishchev , Dmitry Kotov, Evgeny Kryshen , Mikhail Malaev , Victor Riabov, and Yuriy Ryabov for the MPD Collaboration	EPJ Web of Conferences 222, 02005 (2019)
60	Perspectives of thermal photon measurements in heavy ion collisions at NICA	Evgeny Kryshen, Dmitry Ivanishchev, Dmitry Kotov, Mikhail Malaev, Victor Riabov, and Yuriy Ryabov	EPJ Web of Conferences 222, 02006 (2019)

Список публикаций ЛФЭЯ в 2019 г.

1. D.A. Nesterenko, L. Canete, T. Eronen, A. Jokinen, A. Kankainen, Yu.N. Novikov, S. Rinta-Antila, A. de Roubin, M. Vilen. *“High-precision measurement of the mass difference between ^{102}Pd and ^{102}Ru ”*. International Journal of Mass Spectrometry 435 (2019) 204–208.
2. Yu.N. Novikov, Yu.I. Gusev, S.V. Chenmarev, S.A. Eliseev, P.E. Filyanin, T.V. Koneva, D.A. Nesterenko, A.W. Popov, D. Simonovski, O.I. Bezrodnova, N.S. Martynova, Yu.V. Nechiporenko, *“Exotic nuclides at the reactor PIK: PITRAP project”*, Eurasian J. of Phys. and Functional Materials 3 (2019) 63-70.
3. J. Karthein, D. Atanasov, K. Blaum, S. Eliseev, P. Filianin, D. Lunney, V. Mane, M. Mougeoty, D. Neidherr, Y. Novikov, L. Schweikhard, A. Welker, F. Wienholtz, K. Zuber, *“Direct decay-energy measurement as a route to the neutrino mass”*. arXiv:1905.05510v1 [nucl-ex] 14 May 2019.
4. D. Simonovski, Yu. N. Novikov, Yu. I. Gusev, and S. V. Chenmarev, *“Gas transport of fission products from a target near the core of a high-flux reactor”*. Atomic Energy, Vol. 125, No. 6, April, 2019.

Публикации за 2019 год. Лаборатория короткоживущих ядер.

1. I. Tomandl, J. Vacík, U. Köster, L. Viererbl, E. A. Maugeri, S. Heinitz, D. Schumann, M. Ayranov, J. Ballof, R. Catherall, K. Chrysalidis, T. Day Goodacre, D. Fedorov, V. Fedosseev, K. Johnston, B. Marsh, S. Rothe, J. Schell, and Ch. Seiffert, *Measurement of the ${}^7\text{Be}(n, p)$ cross section at thermal energy*, *Phys. Rev. C* 99, 014612 (2019). DOI: 10.1103/PhysRevC.99.014612.

2. S. Sels, T. Day Goodacre, B. A. Marsh, A. Pastore, W. Ryssens, Y. Tsunoda, N. Althubiti, B. Andel, A. N. Andreyev, D. Atanasov, A. E. Barzakh, M. Bender, J. Billowes, K. Blaum, T. E. Cocolios, J. G. Cubiss, J. Dobaczewski, G. Farooq-Smith, D. V. Fedorov, V. N. Fedosseev, K. T. Flanagan, L. P. Gaffney, L. Ghys, P-H. Heenen, M. Huyse, S. Kreim, D. Lunney, K. M. Lynch, V. Manea, Y. Martinez Palenzuela, T. M. Medonca, P. L. Molkanov, T. Otsuka, J. P. Ramos, R. E. Rossel, S. Rothe, L. Schweikhard, M. D. Seliverstov, P. Spagnoletti, C. Van Beveren, P. Van Duppen, M. Veinhard, E. Verstraelen, A. Welker, K. Wendt, F. Wienholtz, R.N. Wolf, and A. Zadvornaya, *Shape staggering of mid-shell mercury isotopes from in-source laser spectroscopy compared with density functional theory and Monte Carlo shell model calculations*, *Phys. Rev. C* 99, 044306 (2019).

<https://doi.org/10.1103/PhysRevC.99.044306>

3. M. Piersa, A. Korgul, L. M. Fraile, J. Benito, E. Adamska, R. Álvarez-Rodríguez, A. E. Barzakh, G. Benzoni, T. Berry, M. J. G. Borge, M. Carmona, K. Chrysalidis, G. Correia, C. Costache, T. Day Goodacre, D. V. Fedorov, V. N. Fedosseev, G. Fernández-Martínez, A. Fijałkowska, M. Fila, D. Galaviz, R. Grzywacz, C. Henrich, A. Illana, Z. Janas, K. Johnston, V. Karanyonchev, M. Kicinska-Habior, R. Lica, H. Mach, M. Madurga, I. Marroquín, B. Marsh, M. C. Martínez, C. Mazzocchi, K. Miernik, C. Mihai, B. Olaizola, S. Paulaskalas, J.-M. Régis, S. Rothe, V. Sánchez-Tembleque, G. Simpson, Ch. Sotty, L. Stan, M. Stanoiu, M. Stryjczyk, A. Turturica, J. M. Udías, V. Vedia, A. Villa, and W. B. Walters, *β -Decay of ${}^{133}\text{In}$: emission from neutron-unbound states in ${}^{133}\text{Sn}$* , *Phys. Rev. C* 99, 024304 (2019). DOI: 10.1103/PhysRevC.99.024304.

4. A. E. Barzakh, J. G. Cubiss, A. N. Andreyev, M. D. Seliverstov, B. Andel, S. Antalic, P. Ascher, D. Atanasov, D. Beck, J. Bieron, K. Blaum, Ch. Borgmann, M. Breitenfeldt, L. Capponi, T. E. Cocolios, T. Day Goodacre, X. Derkx, H. De Witte, J. Elseviers, D. V. Fedorov, V. N. Fedosseev, S. Fritzsche, L. P. Gaffney, S. George, L. Ghys, F. P. Heßberger, M. Huyse, N. Imai, Z. Kalaninová, D. Kisler, U. Köster, M. Kowalska, S. Kreim, J. F. W. Lane, V. Liberati, D. Lunney, K. M. Lynch, V. Manea, B. A. Marsh, S. Mitsuoka, P. L. Molkanov, Y. Nagame, D. Neidherr, K. Nishio, S. Ota, D. Pauwels, L. Popescu, D. Radulov, E. Rapisarda, J. P. Revill, M. Rosenbusch, R. E. Rossel, S. Rothe, K. Sandhu, L. Schweikhard, S. Sels, V. L. Truesdale, C. Van Beveren, P. Van den Bergh, P. Van Duppen, Y. Wakabayashi, K. D. A. Wendt, F. Wienholtz, B. W. Whitmore, G. L. Wilson, R. N. Wolf, and K. Zuber, *Inverse odd-even staggering in nuclear charge radii and possible octupole collectivity in ${}^{217,218,219}\text{At}$ revealed by in-source laser spectroscopy*, *Phys. Rev. C* 99, 054317 (2019).
<https://doi.org/10.1103/PhysRevC.99.054317>

5. J. G. Cubiss, A. N. Andreyev, A. E. Barzakh, B. Andel, S. Antalic, T. E. Cocolios, T. Day Goodacre, D. V. Fedorov, V. N. Fedosseev, R. Ferrer, D. A. Fink, L. P. Gaffney, L. Ghys, M. Huyse, Z. Kalaninová, U. Köster, B. A. Marsh, P. L. Molkanov, R. E. Rossel, S. Rothe, M. D. Seliverstov, S. Sels, A. M. Sjödin, M. Stryjczyk, V. L. Truesdale, C. Van Beveren, P. Van Duppen, and G. L. Wilson, *Fine structure in the α decay of ^{218}At* , Phys. Rev. C 99, 064317 (2019). DOI: 10.1103/PhysRevC.99.064317.

6. L. Ghys, A. N. Andreyev, M. Huyse, P. Van Duppen, S. Antalic, A. Barzakh, L. Capponi, T. E. Cocolios, J. Cubiss, X. Derkx, H. De Witte, J. Elseviers, F. P. Hessberger, Z. Kalaninová, U. Köster, J. F. W. Lane, V. Liberati, S. Mitsuoka, Y. Nagame, K. Nishio, S. Ota, D. Pauwels, R. D. Page, L. Popescu, D. Radulov, M. M. Rajabali, E. Rapisarda, K. Sandhu, V. L. Truesdale, P. Van den Bergh, and Y. Wakabayashi, *α -decay properties of $^{200,202}\text{Fr}$* , Phys. Rev. C 100, 054310 (2019).

7. E. Verstraelen, A. Teigelhöfer, W. Ryssens, F. Ames, A. Barzakh, M. Bender, R. Ferrer, S. Goriely, P.-H. Heenen, M. Huyse, P. Kunz, J. Lassen, V. Manea, S. Raeder, and P. Van Duppen. *Search for octupole-deformed actinium isotopes using resonance ionization spectroscopy*, Phys. Rev. C 100, , 044321 (2019).

Лаборатория мезонной физики конденсированных сред (и. о. зав. лаб. Воробьев С.И.)

Публикации за 2019 год:

1. А.Л. Геталов, **С.И. Воробьев**, Е.Н. Комаров, С.А. Котов, Г.В. Щербаков. *Программа MNK2018 для обработки данных μ SR-эксперимента. Свидетельство о государственной регистрации программы для ЭВМ № 2019663498 от 17.10.2019.*

2. С.И. Воробьев, А.Л. Геталов, Е.И. Головенчиц, Е.Н. Комаров, С.А. Котов, В.А. Санина, Г.В. Щербаков. *μ SR-исследование динамики внутренних магнитных корреляций в мультиферроике $Tb(Bi)MnO_3$ в магнитоупорядоченном и парамагнитном состояниях. Письма в ЖЭТФ, 2019, том 110, вып. 2, с. 118 – 125.*

S.I. Vorob'ev, A.L. Getalov, E.I. Golovenchits, E.N. Komarov, S.A. Kotov, V.A. Sanina, and G.V. Shcherbakov. *μ SR Study of the Dynamics of Internal Magnetic Correlations in $Tb(Bi)MnO_3$ Multiferroic in Magnetically Ordered and Paramagnetic States. JETP Letters, 2019, Vol. 110, No. 2, pp. 133 – 139.*

3. M. Balasoiu, T.N. Astafeva, S.G. Barsov, I. Bica, V.N. Duginov, D.Fluerashu, A.L. Getalov, K.I. Gritsay, E.N. Komarov, S.A. Kotov, S.N. Lysenko, G.V. Scherbakov, C. Stan, Vorob'ev S.I. *Investigation of magnetic structure of the ferrofluid with cobalt ferrite nanoparticles by polarized muons. International Conference on Magnetic Fluids – ICMF 2019, Sorbonne Université in Paris (France) July 8-12, 2019.*



Публикации в 2019 году. Лаборатория малонуклонных систем.

1. S. Belostotski, N. Sagidova, A. Vorobyev
Proton radius reconstruction from simulated electron-proton elastic scattering cross sections at low transfer momenta
arXiv:1903.04975
2. PANDA Collaboration
Technical design report for the PANDA Barrel DIRC detector
J.Phys. G46 (2019) no.4, 045001
3. HERMES Collaboration
Beam-helicity asymmetries for single-hadron production in semi-inclusive deep-inelastic scattering from unpolarized hydrogen and deuterium targets
Phys.Lett. B797 (2019) 134886
4. HERMES Collaboration
Longitudinal double-spin asymmetries in semi-inclusive deep-inelastic scattering of electrons and positrons by protons and deuterons
Phys.Rev. D99 (2019) no.11, 112001
5. S.I.Manaenkov
Model for classical electron with finite mass and action,
Phys. Part. Nuclei Lett. 16 (2019) 176-194
arXiv: 1901.09805

Лаборатория мезонной физики - 2019 (Сумачев)

1	Charge splitting in form factor.	A.B.Gridnev, V.V.Abaev, N.G.Kozlenko	Physics of Atomic Nuclei, 2019, Vol. 82, No. 2, pp.163-167.
<i>Иные публикации</i>			
1.	Measurement of the Helicity Asymmetry E_S for the reaction $\gamma p \rightarrow \pi^0 p$ CBELSA/TAPS Collaboration.	D. Bayadilov, A. Gridnev, I. Lopatin (St. Petersburg, INP) et al.	Apr 29, 2019. 21 pp. e-Print: arXiv:1904.12560 [nucl-ex] PDF
2.	Is there really a narrow nucleon resonance at $W = 1700$ MeV ? CBELSA/TAPS Collaboration.	D. Bayadilov, A. Gridnev, I. Lopatin (St. Petersburg, INP) et al	The 12th International Workshop on the Physics of Excited Nucleons 10 - 14 June 2019, Bonn
3.	Strangeness Photoproduction at the BGO-OD Experiment	T.C. Jude, S. Alef, P. Bauer (Bonn U.), A. Gridnev, N. Kozlenko, D. Novinskiy, V. Sumachev, V. Taraka- nov (St. Petersburg, INP) at all.	Phys.Part.Nucl. 50 (2019) no.5, 493-500 (2019-09-04)
4.	New data on $\vec{\gamma} \vec{p} \rightarrow \eta p$ with polarized photons and protons and their implications for $N^* \rightarrow N \eta$ decay	J. Müller, J. Hartmann, D. Bayadilov, Y. Beloglazov, A. Gridnev, D. Novinskiy at all	Sep 18, 2019 - 10 pages e-Print: arXiv:1909.08464 [nucl-ex] PDF Experiment: BONN-ELSA- CRYSTAL-BARREL
5.	Instrumentation and Detectors (physics.ins- det); Nuclear Experiment (nucl-ex)	S. Alef, P. Bauer, D. Bayadilov,	arXiv:1910.11939 [physics.ins-det] 23 pages.

Отдел вычислительных систем - 2019

S.E. Khoruzhnikov, A.Ye. Shevel

MANAGEMENT SYSTEM FOR SCALABLE GEOGRAPHICALLY DISTRIBUTED DATA CENTER

[direct link to full text](#)

ITMO transaction

Petr Fedchenkov, Andrey Shevel, Sergey Khoruzhnikov, Oleg Sadov, Oleg Lazo and Nikita Samokhin

The cloud of geographically distributed data centers

[direct link to full text](#)

EPJ Web Conf. Volume 214, 2019 23rd International Conference on Computing in High Energy and Nuclear Physics (CHEP 2018)

Список работ сотрудников ОМК за 2019 год

1. F.P. Albicocco (Frascati),... **N. Bondar, B. Bochin, A. Chubykin, G. Gavrilov, S. Gets, S. Kotriakhova, O. Maev, D. Maysuzenko, S. Nasybulin, P. Neustroev, A. Vorobyev** (St. Petersburg, INP), “Long-term Operation of the Multi-Wire-Proportional-Chambers of the LHCb Muon System”// **Journal of Instrumentation. (2019) V.14 P11031**
<https://doi.org/10.1088/1748-0221/14/11/P11031>
2. Бузоверя М.Э., Завьялов Н.В., Карпов И.А., Ткаченко М.И., Гаврилов Г.Е., Дзюба А.А., Майсузенко Д.А., Насыбулин С.А., Гречкина М.В. «Исследование радиационных повреждений катода в прототипе многопроволочной пропорциональной камеры эксперимента CMS» **Ядерная физика и инжиниринг, 2018, том 9, №4, С.328-339.**
DOI:10.1134/S2079562918040036.
3. Гаврилов Г.Е., Маев О.Е., Майсузенко Д.А., Насыбулин С.А., «Восстановление функциональности мюонных камер детектора LHCb при возникновении в них Мальтер-эффекта».
Ядерная физика и инжиниринг, 2018, том 9, №4, С.357-365
DOI: 10.1134/S2079562916040072.

Статьи отдела ОТД 2019

1. F.P. Albicocco (Frascati),... N. Bondar, B. Bochin, A. Chubykin, G. Gavrillov, S. Gets, S. Kotriakhova, O. Maev, **D. Maysuzenko**, S. Nasybulin, P. Neustroev, A. Vorobyev (St. Petersburg, INP), “Long-term Operation of the Multi-Wire-Proportional-Chambers of the LHCb Muon System”// Journal of Instrumentation. V.14 (11): P11031 (1 - 17) (2019) <https://doi.org/10.1088/1748-0221/14/11/P11031>.

2. **G.D. Shabanov**. On the possibility of making natural ball lightning using a new pulse discharge type in the laboratory. Physics - Uspekhi **62** (1) 92 - 107 (2019). DOI: [10.3367/UFNe.2018.03.038318](https://doi.org/10.3367/UFNe.2018.03.038318).

Список публикаций за 2019 год лаборатории криогенной и сверхпроводящей техники

1. Measuring the Proton Radius in High-Energy Muon-Proton Scattering

[COMPASS++/AMBER working group](#)

[Christian Dreisbach](#),... [Alexander A. Vasilyev](#) (St. Petersburg, INP),... [Alexey A. Vorobyov](#) (St. Petersburg, INP) 2019 - 6 pages

PoS DIS2019 (2019) 222, SISSA (2019-07-13)

DOI: [10.22323/1.352.0222](#)

Conference: [C19-04-08 Proceedings](#)

2. Production and Storage of Polarized H₂, D₂ and HD Molecules

[Ralf Engels](#),... [Alexander A. Vasilyev](#), [Leonid Kochenda](#), [Peter Kravtsov](#), [Viktor Trofimov](#), [Marat Vznudaev](#) 2019 - 12 pages

PoS SPIN2018 (2019) 099, SISSA (2019-01-02)

DOI: [10.22323/1.346.0099](#)

Conference: [C18-09-10.6 Proceedings](#)

3. The LHCSpin Project

[C.A. Aidala](#) ([Michigan U.](#)),... [A. Vasilyev](#) (St. Petersburg, INP) Jan 23, 2019 - 6 pages

e-Print: [arXiv:1901.08002](#) [hep-ex]

4. Methods for a blind analysis of isobar data collected by the STAR collaboration

[STAR Collaboration](#) ([J. Adam](#) ,.. [Leonid Kochenda](#), [Peter Kravtsov](#),..Nov 1, 2019 - 16 pages

e-Print: [arXiv:1911.00596](#) [nucl-ex]

Experiment: [BNL-RHIC-STAR](#)

5. Event reconstruction of free-streaming data for the RICH detector in the CBM experiment

J. Adamczewski-Musch ([Darmstadt, GSI](#)), .. L. Kochenda, P. Kravtsov ([St. Petersburg, INP](#) & [Moscow Phys. Eng. Inst.](#)), M. Vznuzdaev ([St. Petersburg, INP](#)),
2019 - 7 pages

EPJ Web Conf. 214 (2019) 01043

(2019)

DOI: [10.1051/epjconf/201921401043](https://doi.org/10.1051/epjconf/201921401043)

Conference: [C18-07-09.6 Proceedings](#)

6. Longitudinal double-spin asymmetry for inclusive jet and dijet production in pp collisions at $\sqrt{s}=510\text{GeV}$

STAR Collaboration (J. Adam ,.. [Leonid Kochenda](#), [Peter Kravtsov](#),. Jun 6, 2019 - 27 pages

Phys.Rev. D100 (2019) no.5, 052005

(2019-09-10)

DOI: [10.1103/PhysRevD.100.052005](https://doi.org/10.1103/PhysRevD.100.052005)

e-Print: [arXiv:1906.02740](https://arxiv.org/abs/1906.02740) [hep-ex] |

Experiment: [BNL-RHIC-STAR](#)

7. Observation of excess J/ψ yield at very low transverse momenta in Au+Au collisions at $\sqrt{s_{NN}}=200\text{ GeV}$

and U+U collisions at $\sqrt{s_{NN}}=193\text{ GeV}$

STAR Collaboration (J. Adam ,.. [Leonid Kochenda](#), [Peter Kravtsov](#),. Apr 25, 2019 - 8 pages

Phys.Rev.Lett. 123 (2019) no.13, 132302

(2019-09-28)

DOI: [10.1103/PhysRevLett.123.132302](https://doi.org/10.1103/PhysRevLett.123.132302)

e-Print: [arXiv:1904.11658](https://arxiv.org/abs/1904.11658) [hep-ex]

Experiment: [BNL-RHIC-STAR](#)

8. Beam Energy and Centrality Dependence of Direct-Photon Emission from Ultrarelativistic Heavy-Ion Collisions

PHENIX Collaboration (A. Adare (Colorado U.) ,... Leonid Kochenda, May 10, 2018 - 10 pages

Phys.Rev.Lett. 123 (2019) no.2, 022301

(2019-07-11)

DOI: [10.1103/PhysRevLett.123.022301](https://doi.org/10.1103/PhysRevLett.123.022301)

e-Print: [arXiv:1805.04084](https://arxiv.org/abs/1805.04084) [hep-ex]

Experiment: [BNL-RHIC-PHENIX](#)

9. Beam-helicity asymmetries for single-hadron production in semi-inclusive deep-inelastic scattering from unpolarized hydrogen and deuterium targets

HERMES Collaboration (A. Airapetian (Giessen U. & Michigan U.) ... P.Kravchenko) Mar 20, 2019 - 29 pages

Phys.Lett. B797 (2019) 134886

(2019-10-10)

DOI: [10.1016/j.physletb.2019.134886](https://doi.org/10.1016/j.physletb.2019.134886)

DESY 19-040, DESY-19-040

e-Print: [arXiv:1903.08544](https://arxiv.org/abs/1903.08544) [hep-ex]

Experiment: [DESY-HERA-HERMES](#)

10. Longitudinal double-spin asymmetries in semi-inclusive deep-inelastic scattering of electrons and positrons by protons and deuterons

HERMES Collaboration (A. Airapetian (Giessen U. & Michigan U.),... P.Kravchenko Oct 16, 2018 - 13 pages

Phys.Rev. D99 (2019) no.11, 112001

(2019-06-06)

DOI: [10.1103/PhysRevD.99.112001](https://doi.org/10.1103/PhysRevD.99.112001)

DESY-18-181, DESY 18-181

e-Print: [arXiv:1810.07054](https://arxiv.org/abs/1810.07054) [hep-ex]

Experiment: [DESY-HERA-HERMES](#)

ПУБЛИКАЦИИ
за 2019 год Лаборатория адронной физики (Федин)

№ п/п	Название публикации (статьи, монографии, пособия и т.д.)	Авторы	Где опубликовано (название журнала, сборника, издательства и т.д.)
1.	JHEP 1901 (2019) 030	Search for pair production of Higgs bosons in the bb^-bb^- final state using proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
2.	Phys.Rev. D99 (2019) no.1, 012001	Search for long-lived particles in final states with displaced dimuon vertices in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
3.	JHEP 1901 (2019) 016	Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with two charged leptons and two jets at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
4.	Phys.Lett. B788 (2019) 96-116	Search for heavy charged long-lived particles in proton-proton collisions at $s\sqrt{s} = 13 \text{ TeV}$ using an ionisation measurement with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
5.	Phys.Lett. B788 (2019) 347-370	Search for vector-boson resonances decaying to a top quark and bottom quark in the lepton plus jets final state	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov,

		in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	V. Grachev, M. Levchenko
6.	Phys.Lett. B788 (2019) 316-335	Search for light resonances decaying to boosted quark pairs and produced in association with a photon or a jet in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
7.	Phys.Rev. D99 (2019) no.1, 012008	A search for pairs of highly collimated photon-jets in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
8.	Phys.Rev. D99 (2019) no.1, 012009	Search for squarks and gluinos in final states with hadronically decaying τ -leptons, jets, and missing transverse momentum using pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
9.	Eur.Phys.J. C79 (2019) no.1, 58	Search for doubly charged scalar bosons decaying into same-sign W boson pairs with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
10	Eur.Phys.J. C79 (2019) no.2, 120	A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
11.	Phys.Lett. B789 (2019) 444-471	Correlated long-range mixed-harmonic fluctuations measured in	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V.

		<i>pp</i> , <i>p</i> +Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector	Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
12.	Phys.Lett. B789 (2019) 167-190	Measurement of photon-jet transverse momentum correlations in 5.02 TeV Pb + Pb and <i>pp</i> collisions with ATLAS	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
13.	Phys.Lett. B789 (2019) 508-529	Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow WW^* \rightarrow e\nu\mu\nu$ decay channel in <i>pp</i> collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
14.	Eur.Phys.J. C79 (2019) no.2, 128	Measurements of <i>W</i> and <i>Z</i> boson production in <i>pp</i> collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
15.	Eur.Phys.J. C79 (2019) no.2, 135	In situ calibration of large-radius jet energy and mass in 13 TeV proton–proton collisions with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
16.	Eur.Phys.J. C79 (2019) no.3, 205	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
17.	Phys.Lett. B790 (2019) 595-614	Study of the hard double-parton scattering contribution to inclusive four-lepton production in <i>pp</i> collisions at $\sqrt{s} = 8$ TeV with the	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko

		ATLAS detector	
18.	Phys.Lett. B790 (2019) 108-128	Measurement of the nuclear modification factor for inclusive jets in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
19.	Phys.Lett. B790 (2019) 1-21	Search for Higgs boson decays into a pair of light bosons in the $bb\mu\mu$ final state in pp collision at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
20.	Phys.Rev. D99 (2019) no.5, 052009	Search for four-top-quark production in the single-lepton and opposite-sign dilepton final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
21.	Eur.Phys.J. C79 (2019) no.4, 290	Measurement of the top quark mass in the $tt^- \rightarrow \text{lepton} + \text{jets}$ channel from $\sqrt{s} = 8 \text{ TeV}$ ATLAS data and combination with previous results	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
22.	JHEP 1904 (2019) 046	Measurements of inclusive and differential fiducial cross-sections of tt -production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
23.	JHEP 1904 (2019) 048	Measurement of the four-lepton invariant mass spectrum in 13 TeV proton-proton collisions with the	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov,

		ATLAS detector	V. Grachev, M. Levchenko
24.	JHEP 1904 (2019) 092	Search for Higgs boson pair production in the bb^-WW^* decay mode at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
25.	JHEP 1904 (2019) 093	Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
26.	Phys.Rev.Lett. 122 (2019) no.15, 151801	Search for the Production of a Long-Lived Neutral Particle Decaying within the ATLAS Hadronic Calorimeter in Association with a Z Boson from pp Collisions at $\sqrt{s} = 13$ TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
27.	JHEP 1904 (2019) 098	Study of the rare decays of B_s^0 and B^0 mesons into muon pairs using data collected during 2015 and 2016 with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
28.	Eur.Phys.J. C79 (2019) no.5, 375	Performance of top-quark and WW -boson tagging with ATLAS in Run 2 of the LHC	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
29.	Eur.Phys.J. C79 (2019) no.5, 374	Measurements of W and Z boson production in pp collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko

30	Eur.Phys.J. C79 (2019) no.5, 382	Measurements of inclusive and differential fiducial cross-sections of $tt\bar{\gamma}$ production in leptonic final states at $\sqrt{s} = 13 \text{ TeV}$ in ATLAS	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
31.	JHEP 1905 (2019) 041	Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
32.	JHEP 1905 (2019) 088	Combinations of single-top-quark production cross-section measurements and $ f_{LV}V_{tb} $ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
33.	JHEP 1905 (2019) 124	Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at $\sqrt{s} = 13 \text{ TeV}$	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
34.	JHEP 1905 (2019) 123	Search for top-quark decays $t \rightarrow Hq$ with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
35.	JHEP 1905 (2019) 141	Measurement of $VH, H \rightarrow bb\bar{}$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko

36.	JHEP 1905 (2019) 164	Search for single production of vector-like quarks decaying into Wb in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
37.	Phys.Lett. B793 (2019) 499-519	Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
38.	Phys.Lett. B793 (2019) 469-492	Observation of electroweak W^+Z boson pair production in association with two jets in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
39.	JHEP 1908 (2019) 033	Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
40.	Eur.Phys.J. C79 (2019) no.8, 666	Measurement of distributions sensitive to the underlying event in inclusive Z boson production in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
41.	Phys.Lett. B795 (2019) 56-75	Search for low-mass resonances decaying into two jets and produced in association with a photon using pp collisions $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko

42.	Eur.Phys.J. C79 (2019) no.9, 733	Searches for scalar leptoquarks and differential cross-section measurements in dilepton–dijet events in proton–proton collisions at a centre-of-mass energy of $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS experiment	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
43.	Phys.Rev. C100 (2019) no.3, 034903	Dijet azimuthal correlations and conditional yields in pp and p+Pb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
44.	Phys.Lett. B796 (2019) 230-252	Measurement of prompt photon production in $\sqrt{s_{NN}} = 8.16 \text{ TeV}$ p + Pb collisions with ATLAS	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
45.	Phys.Lett. B796 (2019) 68-87	Search for high-mass dilepton resonances using 139 fb ⁻¹ of pp collision data collected at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
46.	Measurement of the production cross section for a Higgs boson in association with a vector boson in the $H \rightarrow WW^* \rightarrow \ell\nu\ell\nu$ channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Lett. B798 (2019) 134949
47.	Search for a right-handed gauge boson decaying into a high-momentum heavy neutrino and a charged lepton in pp collisions	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev,	Phys.Lett. B798 (2019) 134942

	with the ATLAS detector at $\sqrt{s} = 13$ TeV	M. Levchenko, D. Pudzha	
48.	Evidence for the production of three massive vector bosons with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Lett. B798 (2019) 134913
49.	Measurement of W^\pm boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.11, 935
50.	Measurement of W^\pm -boson and Z-boson production cross-sections in pp collisions at $\sqrt{s} = 2.76$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.11, 901
51.	Search for heavy neutral leptons in decays of W bosons produced in 13 TeV pp collisions using prompt and displaced signatures with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	JHEP 1910 (2019) 265
52.	Observation of electroweak production of a same-sign W boson pair in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Rev.Lett. 123 (2019) no.16, 161801
53.	Measurement of the inclusive isolated-photon cross section in pp collisions at $\sqrt{s} = 13$ TeV using 36 fb^{-1} of ATLAS data	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	JHEP 1910 (2019) 203
54.	Measurement of ZZ production in the $\ell\ell\nu\nu$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev,	JHEP 1910 (2019) 127

		M. Levchenko, D. Pudzha	
<i>Иные публикации</i>			
1.	Phys.Rev.Lett. 122 (2019) no.8, 089901	Search for resonant and non-resonant Higgs boson pair production in the $bb^- \tau^+ \tau^-$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
2.	Phys.Rev. D99 (2019) no.5, 052003	Search for heavy long-lived multi-charged particles in proton-proton collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
3.	Phys.Rev. D99 (2019) no.5, 052004	Properties of $g \rightarrow bb^-$ at small opening angles in pp collisions with the ATLAS detector at $\sqrt{s} = 13$ TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
4.	Phys.Rev. D99 (2019) no.5, 052005	Search for long-lived particles produced in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS muon spectrometer	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
5.	JINST 14 (2019) P03017	Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
6.	JINST 14 (2019) no.03, P03025	The experimental facility for the Search for Hidden Particles at the CERN SPS	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko

7.	Phys.Rev. D99 (2019) 072001	Cross-section measurements of the Higgs boson decaying into a pair of τ -leptons in proton-proton collisions at $\sqrt{s} = \mathbf{13\ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
8.	Phys.Rev. D99 (2019) no.7, 072009	Measurement of the $t\bar{t}Z$ and $t\bar{t}W$ cross sections in proton-proton collisions at $\sqrt{s} = \mathbf{13\ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
9.	Phys.Rev. D99 (2019) no.9, 092004	Search for heavy particles decaying into a top-quark pair in the fully hadronic final state in pp collisions at $\sqrt{s} = \mathbf{13\ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
10.	JHEP 1905 (2019) 142	Constraints on mediator-based dark matter and scalar dark energy models using $\sqrt{s} = \mathbf{13\ TeV}$ pp collision data collected by the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
11.	Phys.Rev. D99 (2019) no.9, 092007	Search for heavy charged long-lived particles in the ATLAS detector in $36.1\ \text{fb}^{-1}$ of proton-proton collision data at $\sqrt{s} = \mathbf{13\ TeV}$	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
12.	JINST 14 (2019) no.06, P06012	Modelling radiation damage to pixel sensors in the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
13.	JHEP 1906 (2019) 144	Searches for third-generation scalar leptoquarks in $\sqrt{s} = \mathbf{13\ TeV}$ pp	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V.

		collisions with the ATLAS detector	Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
14.	JHEP 1907 (2019) 117	Search for scalar resonances decaying into $\mu+\mu^-$ in events with and without b-tagged jets produced in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
15.	Phys.Rev.Lett. 123 (2019) no.4, 042001	Comparison of Fragmentation Functions for Jets Dominated by Light Quarks and Gluons from pp and Pb+Pb Collisions in ATLAS	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
16.	Phys.Rev. D100 (2019) no.1, 012006	Search for chargino and neutralino production in final states with a Higgs boson and missing transverse momentum at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
17.	Phys.Rev.Lett. 123 (2019) no.5, 052001	Observation of Light-by-Light Scattering in Ultraperipheral Pb+Pb Collisions with the ATLAS Detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
18.	Phys.Rev. D100 (2019) no.3, 032007	Search for electroweak diboson production in association with a high-mass dijet system in semileptonic final states in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
19.	Eur.Phys.J. C79 (2019) no.9, 760	Measurement of the cross-section and charge asymmetry of W bosons	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V.

		produced in proton–proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector	Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
20.	JINST 14 (2019) no.09, P09011	Resolution of the ATLAS muon spectrometer monitored drift tubes in LHC Run 2	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
21.	Phys.Rev. D100 (2019) no.5, 052011	Properties of jet fragmentation using charged particles measured with the ATLAS detector in pp collisions at $\sqrt{s} = 13 \text{ TeV}$	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
22.	Phys.Rev. D100 (2019) no.5, 052013	Search for a heavy charged boson in events with a charged lepton and missing transverse momentum from pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko
23.	Measurement of the cross-section and charge asymmetry of W bosons produced in proton–proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.9, 760
24.	Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.10, 884
25.	Search for excited electrons singly produced in proton–proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS experiment at the LHC	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.9, 803

26.	Search for a heavy charged boson in events with a charged lepton and missing transverse momentum from pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Rev. D100 (2019) no.5, 052013
27.	Search for diboson resonances in hadronic final states in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	JHEP 1909 (2019) 091
28.	Properties of jet fragmentation using charged particles measured with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Rev. D100 (2019) no.5, 052011
29.	Identification of boosted Higgs bosons decaying into b -quark pairs with the ATLAS detector at 13 TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.10, 836
30.	ATLAS b -jet identification performance and efficiency measurement with tt^{-} events in pp collisions at $\sqrt{s} = 13$ TeV	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.11, 970
31.	Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.12, 985
32.	Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at 8 TeV using the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Eur.Phys.J. C79 (2019) no.10, 847

33.	Measurement of angular and momentum distributions of charged particles within and around jets in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector	ATLAS Collaboration, O. Fedin, V. Maleev, V. Scheglsky, V. Solovyev, A. Ezhilov, Y. Ryabov, V. Grachev, M. Levchenko, D. Pudzha	Phys.Rev. C100 (2019) no.6, 064901
-----	--	---	------------------------------------