

Скачкова Анна Николаевна,

(Научно-экспериментальный отдел физики адронов - Группа №1 теоретико-феноменологического анализа экспериментальных данных, старший научный сотрудник)

Список научных работ

(данные на 11.11.2021)

Публикации в рецензируемых журналах (зарубежные):

1. Simplification of flavor combinatorics in evaluation of hadronic processes.
E.E. Boos, V.A. Ilyin, A.N. Skachkova, Journal of High Energy Physics Изд: **JHEP** 0005 (2000) 052, 2000
2. The front-end electronics for the COMPASS MWPCs
A. Amoroso, M. Colantoni, O. Denisov, A. Ferrero, V. Frolov, A. Grasso, A. Korenchenko et al.
Nucl.Instrum.Meth.A518:495-497,2004, A518, 495-497, 2004
3. Measurement of the Spin Structure of the Deuteron in the DIS Region
By COMPASS Collaboration (E.S.Ageev et al.), **Phys.Lett.B**, 612, 3-4, 154-164, 2005
4. First Measurement of the Transverse Spin Asymmetries of the Deuteron in SemiInclusive Deep Inelastic Scattering
By COMPASS Collaboration (V.Yu.Alexakhin et al.), **Phys.Rev.Lett.**, 94, 20-27, 202002, 2005
5. Search for the Phi(1860) pentaquark at COMPASS
By COMPASS Collaboration (Ageev E.S. et al.), **Eur. Phys. J.**, Изд:EDP Sciences, C41, 469-474, 2005
6. Gluon Polarization in the nucleon from quasireal photoproduction of highP(T) hadron pairs
By COMPASS Collaboration (E.S.Ageev et al.), **Phys.Lett.B**, 633, 1, 25-32, 2006
7. Spin asymmetry $A_1(d)$ and the spin-dependent structure function $g_1(d)$ of the deuteron at low values of x and Q^2 .
By COMPASS Collaboration (E.S.Ageev et al.), **Phys.Lett.B**, 647, 5-6, 330-340, 2007
8. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC
The CMS collaboration., **Phys. Lett. B**, 716, 1, 30-61, 2012
9. A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider
CMS Collaboration (S. Chatrchyan et al.), **Science**, ISSN:0036-8075, eISSN:1095-9203, Изд:The American Association for the Advancement of Science, 338, 6114, 1569-1575, 2012
10. Technical design report for the PANDA (AntiProton Annihilations at Darmstadt) Straw Tube Tracker
The PANDA Collaboration, **European Physical Journal A - Hadrons and Nuclei**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer-Verlag, 49, 25, 1-104, 2013
11. Monte-Carlo simulation of lepton pairs production in " $p - p - > \mu^+ \mu^- + X$ " events at $E_{\text{beam}} = 5$

GeV

Skachkova A.N., **Journal of Physics: Conference Series**, ISSN:1742-6588, eISSN:1742-6596, 426, 2013, 012031, 2013

12. Monte-Carlo simulation of lepton pairs production in " $p - p \rightarrow e^+ e^- + X$ " events at PANDA experiment

A.N.Skachkova, **Journal of Physics: Conference Series**, ISSN:1742-6588, eISSN:1742-6596, 503, 1 (2014), 012016, 2014

13. Experimental access to Transition Distribution Amplitudes with the –PANDA experiment at FAIR

PANDA Collaboration, **The European Physical Journal A**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer Berlin Heidelberg, 51, 8, 107, 2015

14. Feasibility studies of time-like proton electromagnetic form factors at –PANDA at FAIR

The PANDA Collaboration, Singh B., Erni W. et al., **The European Physical Journal A**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer Berlin Heidelberg, 52, 10, 325:1-23, 2016

15. Study of doubly strange systems using stored antiprotons.

The PANDA Collaboration, **Nuclear Physics A**, ISSN:0375-9474, eISSN:1873-1554, Изд:Elsevier B.V., 954, 323-340, 2016

16. Feasibility study for the measurement of πN transition distribution amplitudes at –PANDA in $-\bar{p}p \rightarrow J/\Psi \pi^0$

PANDA Collaboration, **Physical Review D** covering particles, fields, gravitation, and cosmology, ISSN:2470-0010, eISSN:2470-0029, Изд:The American Physical Society, 95, 3, 032003, 2017

17. Precision resonance energy scans with the PANDA experiment at FAIR: Sensitivity study for width and line-shape measurements of the X(3872)

The PANDA Collaboration, **The European Physical Journal A**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer Berlin Heidelberg, 55, 3, 42:1-18, 2019

18. Technical design report for the –PANDA Barrel DIRC detector

B. Singh, W. Erni, B. Krusche, M. Steinacher, N. Walford, et al., **Journal of Physics G: Nuclear and Particle Physics**, Изд:IOPScience, 46, 4, 045001, 2019

19. On background study for MMT-Drell-Yan process at SPD (NICA) energy

Anna Skachkova, **Journal of Physics: Conference Series**, Изд:IOP Publishing, 1435, 1, 012049, 2020

20. Feasibility studies for the measurement of time-like proton electromagnetic form factors from $-\bar{p}p \rightarrow \mu^+ \mu^-$ at –PANDA at FAIR

PANDA Collaboration (G. Barucca, F. Davi, G. Lancioni et al.), **European Physical Journal A: Hadrons and Nuclei**, ISSN:1434-6001, eISSN:1434-601X, Изд:Societ? Italiana di Fisica and Springer-Verlag, 57, 30:1-22, 2021

21. The potential of Λ and Ξ^- studies with PANDA at FAIR

PANDA Collaboration, **The European Physical Journal A**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer Berlin Heidelberg, 57, 4, 154:1-26, 2021

22. Study of excited Ξ baryons with the –PANDA detector

G.Barucca, F. Davi, G.Lancioni et al., **The European Physical Journal A**, ISSN:1434-6001, eISSN:1434-601X, Изд:Springer Berlin Heidelberg, 57, 4, 149:1-19, 2021

23. PANDA Phase One

Публикации в рецензируемых журналах (русские):

1. On pair production of Scalar Top Quarks in $e+e-$ Collisions at ILC and a Possibility of Their Mass Reconstruction
A.Bartl, W.Majerotto, K.Moenig, A.N.Skachkova, N.B.Skachkov, **Письма в ЭЧАЯ**, ISSN:1814-5957, eISSN:1814-5973, Изд:ОИЯИ, 6, 3(152), 300-311, 2009
2. On Lepton Pair Production in Proton-Antiproton Collisions at Intermediate Energies
A.Н.Скачкова, Н.Б.Скачков, **Письма в ЭЧАЯ**, ISSN:1814-5957, eISSN:1814-5973, Изд:ОИЯИ, 6, 4(153), 504-518, 2009
3. Scalar top quarks production in polarized photon-photon collisions at ILC
A. Bartl, W. Majerotto, K. Moenig, A. N. Skachkova and N. B. Skachkov, **Письма в ЭЧАЯ**, ISSN:1814-5957, eISSN:1814-5973, Изд:ОИЯИ, 9, 1, 53-76, 2012
4. Perspectives of Study the Direct Photon Production Process at FAIR Energy
A.Н.Скачкова, Н.Б.Скачков, **Physics of Particles and Nuclei Letters**, ISSN:ISSN:154-4771, Изд:© Pleiades Publishing, Ltd., 2015, 12, 6, 763-772, 2015
5. SPD Range (Muon) System
V.M. Abazov, G.D. Alexeev, G.A. Golovanov, S.A. Kutuzov, A.A. Piskun, I.K. Prokhorov, A.G. Samartsev, A.N. Skachkova, V.V. Tokmenin, A.Y. Verkheev, L.S. Vertogradov, N.I. Zhuravlev, **Phys.Part.Nucl.**, 52, 4, 797-800, 2021

Материалы научных мероприятий (международные, устный доклад):

1. Workshop on Future Physics at COMPASS, CERN, Geneva, Switzerland
Measurements of π and K Polarizability @ COMPASS, M.L. Colantoni, F. Balestra, R. Bertini, M.P. Bussa, O. Denisov, A. V. Dolgopolov, M.A. Faessler, A. Ferrero, L. Ferrero, J. Friedrich, V. Frolov, R. Garfagnini, N. Grasso, V. Kolossov, R. Koehn, A. Maggiora, M. Maggiora, A. Manara, Yu. Mikhailov, M.A. М и др., 121:1-9, CERN Yellow Reports: Conference Proceedings, 2004

Материалы научных мероприятий (международные, секционный доклад):

1. QFTHEP, SINP MSU, Москва, Россия
W + jets Production at LHC -- CompHEP, VECBOS and PYTHIA Comparison at the Partonic Level, V.A. Пуйн, A.N. Skachkova, 323-326, MSU-Press 2000, 1999
2. ISBN 5-85165-579-8 International School-Seminar "ACTUAL PROBLEMS OF PARTICLE PHYSICS", Гомель, Беларусь
W+jet production at LHC - CompHEP, VECBOS and PYTHIA comparison at partonic level., V.Пуйн, A.Skachkova, 142-146, ОИЯИ, Издательский отдел Объединенного института ядерных исследований, 2, 1999
3. VII International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT 2000), FermiLab, Batavia, USA
CompHEP - PYTHIA interface: integrated package for the collision events generation based on exact matrix elements, A.S. Belyaev, E.E. Boos, A.N. Vologdin, M.N. Dubinin, V.A. Пуйн, A.P.

Kryukov, A.E. Pukhov, A.N. Skachkova, V.I. Savrin, A.V. Sherstnev, S.A. Shichanin, 211-213, 0-7354-0023-7, 2000

4. ISBN 2-7302-1282-5 International Conference on Linear Colliders (LCWS 2004), l'Ecole Polytechnique, Париж, Франция

Stop pair production in polarized photon photon collisions., A. Bartl, W. Majerotto, K. Monig, A. Skachkova, N. Skachkov, 919-921, Editions de l'Ecole Polytechnique, 2, 2004

5. ISBN 5-9530-0142 International School-Seminar

"Lepton pair production at PANDA experiment", A. Skachkova, N. Skachkov, 114-138, ОИЯИ, Издательский отдел Объединенного института ядерных исследований, 2, 2005

6. 15th International Seminar on High Energy Physics QUARKS-2008, Institute for Nuclear Research of RAS, Sergiev Posad, Russia

Pair production of scalar top quarks in $e+e-$ collisions at ILC, A. Bartl, W. Majerotto, K. Monig, A.N. Skachkova, N. B. Skachkov, 227-246, Издательский отдел ИЯИ РАН, Труды 15-го Международного семинара КВАРКИ 2008, 1, ISBN 978-5-94274-123-5, 2008

7. XIX Балдинский международный семинар по проблемам физики высоких энергий

Lepton pair production in $p\bar{p}$ collisions at intermediate energies., A.N. Skachkova, N. B. Skachkov, 43-49, JINR, RELATIVISTIC NUCLEAR PHYSICS AND QUANTUM CHROMODYNAMICS Proceedings of the XIX International Baldin Seminar on High Energy Physics Problems, 1, XVI, ISBN: 978-5-9530-0202-8, 2008

8. XIX International Baldin Seminar on High Energy physics problems "Relativistic nuclear physics & Quantum Chromodynamics", JINR, Dubna, Russia

Hadronic jets and search for stop quarks at ILC, A. Bartl, W. Majerotto, K. Monig, A.N. Skachkova, N. B. Skachkov, 173-181, ОИЯИ, RELATIVISTIC NUCLEAR PHYSICS AND QUANTUM CHROMODYNAMICS. Proceedings of the XIX International Baldin Seminar on High Energy Physics Problems, 1, XVI, ISBN: 978-5-9530-0202-8, 2008

9. 16th International Seminar on High Energy Physics "QUARKS-2010", ИЯИ РАН, Коломна, Россия

Pair production of Scalar Top Quarks in polarized Photon-Photon Collisions at ILC, A.N. Skachkova, N. B. Skachkov, A. Bartl, W. Majerotto, K. Moenig, 186-215, Moscow, 2010, ИЯИ, Москва, 2, 2010

10. The XXth International Workshop High Energy Physics and Quantum Field Theory, НИИЯФ МГУ, Сочи, Россия

Study of the process of scalar top pairs production at ILC, A. Bartl, W. Majerotto, K. Moenig, A.N. Skachkova, N. B. Skachkov, 1-6, **PoS - Proceedings of Science** (SISSA - <http://pos.sissa.it>), PoS(QFTHEP2011)027, 1824-8039, 2011

11. QUARKS-2014. 18th International Seminar on High Energy Physics, ИЯИ РАН, Суздаль, Россия

«Perspectives of study of direct photon production at FAIR», A. Н. Скачкова, 2014

Материалы научных мероприятий (международные, стендовый доклад):

1. XIV International Conference on Hadron Spectroscopy "Hadron2011", Technische Universitat; Munchen, Мюнхен, Германия

On lepton pair production in proton-antiproton collisions at intermediate energies and the main backgrounds., A. Н. Скачкова, eConf C110613 (2011) [1108.6289], 2011

Материалы научных мероприятий (русские, секционный доклад):

1. ,5-85165-528-3 Научная конференция молодых ученых и специалистов ОИЯИ, 3-я, ОИЯИ, Дубна, Россия
Исследование вклада адронного фона в реакциях образования Хиггсовского бозона при энергиях LHC в области передней мюонной станции ME1/1 установки CMS, А.Н.Скачкова, 53-56, ОИЯИ, Труды третьей научной конференции молодых ученых и специалистов ОИЯИ, 1999
2. ,ISBN 5-9751-0024-0 Десятая научная конференция молодых ученых и специалистов ОИЯИ, ОМУС ОИЯИ, Дубна, Россия
Stop pair production in photon-photon collisions at ILC., А.Н.Скачкова, 135-138, ФГУП ГНЦ РФ - ВНИИ геосистем, Труды конференции, ISBN 5-9751-0024-0, 2006

Электронные публикации:

1. The QCD and Standard Model Working Group: Summary Report from Les Houches
P. Aurenche, C. Balazs, R.D. Ball, T. Binoth, E. Boos, S. Catani, J. Collins, V. del Duca, M. Dittmar, M. Fontannaz, S. Frixione, J.P. Guillet, G. Heinrich, J. Huston, V. Ilyin, Y. Kato, K. Odagiri, F. Paige, E. Pilon, A. Pukhov, I. Puljak, A. Semenov, A. Skatchkova, D. Soper, V. Tano, S. Tapprogge, W.K. Tung, W. Vogelsang, M. Werlen, D. Zeppenfeld, hep-ph/0005114, 2000
2. Muon pair production in proton-antiproton interactions at intermediate energies
A.N.Skachkova, N.B.Skachkov, arXiv:hep-ph/0412279v1, 2004
3. Technical Design Report for PANDA Electromagnetic Calorimeter (EMC)
PANDA Collaboration: W. Erni et al., arXiv:0810.1216v1 [physics.ins-det], 2008
4. On pair production of scalar top quarks in $e^+ e^-$ collisions at ILC and a possibility of their mass reconstruction
A.Bartl, W.Majerotto, K.Moenig, A.N.Skachkova, N.B.Skachkov, arXiv:0906.3805 [hep-ph], 2009
5. Technical Design Report for the PANDA Solenoid and Dipole Spectrometer Magnets
The PANDA Collaboration: W. Erni et al., e-Print: arXiv:0907.0169 (July 2009), 2009
6. Physics Performance Report for PANDA: Strong Interaction Studies with Antiprotons
PANDA Collaboration: W. Erni et al., arXiv:0903.3905 [physics.ins-det] (March 2009), 2009
7. Pair production of scalar top quarks in polarized photon-photon collisions at ILC.
A. Bartl, W. Majerotto, K. Monig, A.N. Skachkova, N.B. Skachkov, arXiv:0804.1700v3 [hep-ph], 2010
8. Pair production of scalar top quarks in e^+e^- collisions at ILC.
A.Bartl, W.Majerotto, K.Moenig, A.N.Skachkova, N.B.Skachkov, arXiv:0804.2125v3 [hep-ph], 2010
9. Monte-Carlo simulation of lepton pair production in " $p - p \rightarrow l^+ l^- + X$ " events at $E_{\text{beam}} = 14$ GeV.
A.N.Skachkova, N.B.Skachkov, G.D.Alexeev, arXiv:hep-ph/0506139v2, 2011
10. On lepton pair production in proton-antiproton collisions at intermediate energies and the main backgrounds.
A.N.Skachkova, arXiv:1108.6289 [hep-ph], 2011

11. Technical Design Report for the: PANDA Micro Vertex Detector
PANDA Collaboration, **arXiv:1207.6581** [physics.ins-det] , 2012
12. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC
The CMS Collaboration, **arXiv:1207.7235** [hep-ex] , 2012
13. Technical Design Report for the: PANDA Straw Tube Tracker
The PANDA Collaboration: W. Erni et al., **arXiv:1205.5441v2** [physics.ins-det], 2012
14. Experimental access to Transition Distribution Amplitudes with the PANDA experiment at FAIR
PANDA Collaboration, **arXiv:1409.0865** [hep-ex], 2014
15. Feasibility studies of time-like proton electromagnetic form factors at PANDA at FAIR
PANDA Collaboration, **arXiv:1606.01118** [hep-ex], 2016
16. Feasibility study for the measurement of piN TDAs at PANDA in $-p p \rightarrow J/\psi \pi^0$
PANDA Collaboration, **arXiv:1610.02149** [nucl-ex], 2016
17. Technical Design Report for the Panda Forward Spectrometer Calorimeter
PANDA Collaboration, **arXiv:1704.02713** [physics.ins-det], 2017
18. Technical Design Report for the PANDA Barrel DIRC Detector
PANDA Collaboration, **arXiv:1710.00684** [physics.ins-det], 2017
19. Precision resonance energy scans with the PANDA experiment at FAIR: Sensitivity study for width and line-shape measurements of the X(3872)
The PANDA Collaboration., **arXiv:1812.05132** [hep-ex], 2018
20. Technical Design Report for the PANDA Endcap Disc DIRC
PANDA Collaboration, **arXiv:1912.12638** [physics.ins-det], 2019
21. Feasibility studies for the measurement of time-like proton electromagnetic form factors from $-p p \rightarrow \mu^+ \mu^-$ at $-PANDA$ at FAIR
The PANDA Collaboration, **arXiv:2006.16363** [hep-ex], 2020
22. The potential of Λ and Ξ^- studies with PANDA at FAIR
The PANDA Collaboration, **arXiv:2009.11582** [hep-ex], 2020
23. PANDA Phase One
PANDA Collaboration, **arXiv: 2101.11877** [hep-ex], 2020
24. Conceptual design of the Spin Physics Detector
SPD Collaboration, **arXiv:2102.00442** [hep-ex], 2021
25. Study of Excited Ξ Baryons with the $-PANDA$ Detector
PANDA Collaboration, **arXiv:2012.01776** [hep-ex], 2021