

ПОКАЗАТЕЛИ РЕЗУЛЬТАТОВ НАУЧНОЙ ДЕЯТЕЛЬНОСТИ
сотрудников Лаборатории моделирования физических процессов

		ПРНД	
1	Красников Николай Валерьевич	590,03	602,30 (руководителя)
2	Андреев Юрий Михайлович	328,49	
3	Гниненко Сергей Николаевич	647,48	
4	Дерменев Александр Владимирович	419,85	
5	Кирсанов Михаил Михайлович	518,21	
6	Климай Петр Александрович	9,00	
7	Корнеев Антон Евгеньевич	418,85	
8	Тлисов Данила Анатольевич	389,89	
9	Торопин Александр Николаевич	365,66	
	<i>и примкнувший к ним</i>		
	Голубев Николай Александрович	262,42	группа БАК

Красников Николай Валерьевич, род. 03.05.1951, дфмн, завлаб МФП, ПРНД за 2017-2018 гг.

Статьи:

1. Banerjee D. et al. (NA64 Collaboration). Search for invisible decays of sub-GeV dark photons in missing-energy events at the CERN SPS // Phys.Rev.Lett. 118: 1, 011802, 2017. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$
2. Chatrchyan S. et al. (CMS Collaboration). Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 50-71, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$
3. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$
4. Chatrchyan S. et al. (CMS HCAL Collaboration). Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam // JINST 13: P01002, 2018. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$
5. Banerjee D. et al. (NA64 Collaboration). Search for vector mediator of Dark Matter production in invisible decay mode // Phys.Rev.D97: no.7, 072002, 2018. ПРНД = $4,394 \cdot 30 \cdot 0,100 = 13,18$
6. Gninenko S.N., Kirpichnikov D.V., Kirsanov M.M., Krasnikov N.V. The exact tree-level calculation of the dark photon production in high-energy electron scattering at the CERN SPS // Phys.Lett.B82: 406-411, 2018. ПРНД = $4,254 \cdot 30/4 = 31,91$
7. Gninenko S.N., Krasnikov N.V. Probing the muon $g_{\mu-2}$ anomaly, $L_{\mu} - L_{\tau}$ gauge boson and Dark Matter in dark photon experiments // Phys.Lett.B783: 24-28, 2018. ПРНД = $4,254 \cdot 30/2 = 63,81$
8. Banerjee D. et al. (NA64 Collaboration). Search for a Hypothetical 16.7 MeV Gauge Boson and Dark Photons in the NA64 Experiment at CERN // Phys.Rev.Lett. 120: no.23, 231802, 2018. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$
9. Chatrchyan S. et al. (CMS Collaboration). Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics // JINST 12: P12034, 2017. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$
10. Bityukov S., Krasnikov N., Smirnova V. On one method of comparison experimental and theoretical data // EPJ Web Conf. 191: 2017, 2018. ПРНД = $8/3 = 2,67$
11. Bityukov S., Krasnikov N., Okunev N., Taperechkina V. On the notion “significance of the difference” // J.Phys.Conf.Ser. 1085: no.5, 052013, 2018. ПРНД = $8/4 = 2,00$

Доклады:

1. Красников Н.В. Поиск легкой темной материи на ускорителях. Эксперимент NA64 // 4-й Российско-Испанский Конгресс: физика элементарных частиц и атомного ядра, астрофизика и космология, Дубна, Россия, 4-8 сентября, 2017, устный.
<https://indico.jinr.ru/getFile.py/access?resId=0&materialId=11&confId=132>. ПРНД = 25,00
2. Красников Н.В. Поиск легкого темного векторного бозона: эксперимент NA64 // Международная школа "Quantum field theory at the limits: from strong fields to heavy quarks", Дубна, Россия, 18-30 июля, 2017, устный.
<http://indico.jinr.ru/internalPage.py?pageId=6&confId=99>. ПРНД = 25,00
3. Kirsanov M. Search for dark sector physics in missing energy events with NA64 // 18th Lomonosov Conference, Moscow, Russia, 24-27 August, 2017, устный.
http://www.icas.ru/english/LomCon/18lomcon/18LomCon_programme.htm. ПРНД = 15/10 = 1,50
4. Krasnikov N.V. Search for light dark matter at accelerators. NA64 experiment // QUARKS-2018, 20th International Seminar on High Energy Physics, Valday, Russia, 27 May - 2 June, 2018, устный.
https://q2018.inr.ac.ru/event/1/contributions/47/attachments/133/138/DM_Quarks2018.pdf. ПРНД = 25,00
5. Krasnikov N.V. Perspectives of the search for light dark matter at accelerators // Dark matter @ LHC workshop, Heidelberg, Germany, 9-14 April, 2018, устный. <https://www.kip.uni-heidelberg.de/dmlhc>. ПРНД = 25,00
6. Krasnikov N.V. Search for light dark matter at accelerators. NA64 experiment // Helmholtz international school «Modern Colliders - Theory and Experiment 2018», 2018, Dubna, Russia, 22 July - 1 August, 2018, устный. <https://indico.jinr.ru/conferenceDisplay.py?confId=418>. ПРНД = 25,00

Препринты:

1. Krasnikov N.V. The muon ($g - 2$) anomaly and a new light vector boson // arXiv:1702.04596 [hep-ph], 2017. ПРНД = 3/1 = 3,00
2. Krasnikov N.V. Light scalars, ($g_{\mu} - 2$) muon anomaly and dark matter in a model with a Higgs democracy // arXiv:1707.00508 [hep-ph], 2017. ПРНД = 3/1 = 3,00
3. Gninenko S.N., Kirpichnikov D.V., Krasnikov N.V. Probing millicharged particles with NA64 experiment at CERN // arXiv:1810.06856 [hep-ph], 2018. ПРНД = 3/3 = 1,00

+ **Общий список** (см.стр.11)

Итого: ПРНД = 590,03

Андреев Юрий Михайлович, род. 21.09.1951, кфмн, снс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

1. Chatrchyan S. et al. (CMS Collaboration). Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 50-71, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$
2. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$

3. Chatrchyan S. et al. (CMS HCAL Collaboration). Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam // JINST 13: P01002, 2018. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$
4. Chatrchyan S. et al. (CMS Collaboration). Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics // JINST 12: P12034, 2017. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$
5. Musienko Yu., Heering A., Ruchti R., Wayne M., Andreev Yu., Karneyeu A., Postoev V. Radiation damage in silicon photomultipliers exposed to neutron radiation // JINST 12: C07030, 2017. ПРНД = $1,258 \cdot 30 / 7 = 7,55$
6. Musienko Yu., Heering A., Ruchti R., Wayne M., Andreev Yu., Karneyeu A., Postoev V. Radiation damage of prototype SiPMs for the CMS HCAL Barrel phase I upgrade // Nucl.Instrum.Meth.A 912: 359-362, 2018. ПРНД = $1,336 \cdot 30 / 7 = 8,02$

Доклады:

1. Musienko Yu. Radiation damage study of SiPMs for the CMS HCAL/HGC Upgrade // International Workshop "Perspectives on Physics and on CMS at HL-LHC", Varna, Bulgaria, 29 August - 1 September, 2017, устный. <http://cms-varna2017.jinr.ru/>. ПРНД = $15/5 = 3,00$
2. Korneev A. Radiation damage of prototype SiPMs for the CMS HCAL Barrel phase I upgrade // 8th International Conference New Developments In Photodetection, Tours, France, 3-7 July, 2017, стендовый. <http://ndip.in2p3.fr/tours17/>. ПРНД = $10/5 = 2,00$
3. Musienko Yu. Radiation damage study of SiPMs for the CMS BH HGAL // 20th Annual RDMS CMS Collaboration Conference, Tashkent, Uzbekistan, 12-15 September, 2018, устный. <https://indico.cern.ch/event/754760/timetable/#20180915.detailed>. ПРНД = $15/5 = 3,00$

Конструкторская документация:

1. Линейка кремниевых фотоумножителей. Комплект конструкторской документации МАГД.432233.001. ПРНД = $3/1 = 3,00$
2. Линейка кремниевых фотоумножителей. Программа и методика испытаний МАГД.432233.001ПМ. ПРНД = $3/1 = 3,00$
3. Стенд измерения вольт-амперных характеристик кремниевых фотоумножителей. Руководство пользователя МАГД.411728.001ИЗ. ПРНД = $3/1 = 3,00$
4. Стенд измерения шумовых спектров кремниевых фотоумножителей. Руководство пользователя МАГД.411733.001ИЗ. ПРНД = $3/1 = 3,00$
5. Стенд измерения импеданса кремниевых фотоумножителей. Руководство пользователя МАГД.411733.002ИЗ. ПРНД = $3/1 = 3,00$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 328,49

Гниненко Сергей Николаевич, род. 10.03.1952, кфмн, внс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

1. Banerjee D. et al. (NA64 Collaboration). Search for invisible decays of sub-GeV dark photons in missing-energy events at the CERN SPS // Phys.Rev.Lett. 118: 1, 011802, 2017. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$
2. Chatrchyan S. et al. (CMS Collaboration). Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 50-71, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$

3. Antonello M. et al. Muon momentum measurement in ICARUS-T600 LAr-TPC via multiple scattering in few-GeV range // JINST 12: 304010, 2017. ПРHD = $1,258 \cdot 30 \cdot 0,075 = 2,83$
4. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРHD = $4,254 \cdot 30 \cdot 0,007 = 0,89$
5. Depero E. et al. High purity 100 GeV electron identification with synchrotron radiation // Nucl.Instrum.Meth.A 866: 196-201, 2017. ПРHD = $1,336 \cdot 30 \cdot 0,100 = 4,01$
6. Anastassopoulos V. et al. (CAST Collaboration). New CAST Limit on the Axion-Photon Interaction // Nature Phys. 13: 584-590, 2017. ПРHD = $22,727 \cdot 30 \cdot 0,075 = 51,14$
7. Anastassopoulos V. et al. (TASTE Collaboration). Towards a medium-scale axion helioscope and haloscope // JINST 12: P11019, 2017. ПРHD = $1,258 \cdot 30 \cdot 0,100 = 3,77$
8. Banerjee D. et al. Performance of Multiplexed XY Resistive Micromegas detectors in a high intensity beam // Nucl.Instrum.Meth.A 881: 72-81, 2018. ПРHD = $1,336 \cdot 30 \cdot 0,100 = 4,01$
9. Banerjee D. et al. (NA64 Collaboration). Search for vector mediator of Dark Matter production in invisible decay mode // Phys.Rev.D97: no.7, 072002, 2018. ПРHD = $4,394 \cdot 30 \cdot 0,100 = 13,18$
10. Gninenko S.N., Kirpichnikov D.V., Kirsanov M.M., Krasnikov N.V. The exact tree-level calculation of the dark photon production in high-energy electron scattering at the CERN SPS // Phys.Lett.B82: 406-411, 2018. ПРHD = $4,254 \cdot 30 / 4 = 31,91$
11. Gninenko S.N., Krasnikov N.V. Probing the muon $g_{\mu-2}$ anomaly, $L_{\mu} - L_{\tau}$ gauge boson and Dark Matter in dark photon experiments // Phys.Lett.B783: 24-28, 2018. ПРHD = $4,254 \cdot 30 / 2 = 63,81$
12. Banerjee D. et al. (NA64 Collaboration). Search for a Hypothetical 16.7 MeV Gauge Boson and Dark Photons in the NA64 Experiment at CERN // Phys.Rev.Lett. 120: no.23, 231802, 2018. ПРHD = $8,839 \cdot 30 \cdot 0,100 = 26,52$
13. Gninenko S., Kovalenko S., Kuleshov S., Lyubovitskij V., Zhevlakov A. Deep inelastic $e^{-}\tau^{-}$ and $\mu^{-}\tau^{-}$ conversion in the NA64 experiment at the CERN SPS // Phys.Rev.D98: no.1, 015007, 2018. ПРHD = $4,394 \cdot 30 / 5 = 26,36$

Доклады:

1. Gninenko S. Search for dark sector physics in NA64 // Physics Beyond Collider International Kickoff Workshop, CERN, Geneva, Switzerland, 21-22 November, 2017, устный. <https://indico.cern.ch/event/644287/timetable/#20171121>. ПРHD = 25,00
2. Gninenko S. NA64 Status 2017 // Open SPCS Meeting, CERN, Geneva, Switzerland, 21-22 November, 2017, устный. https://indico.cern.ch/event/645753/contributions/2622156/attachments/1479223/2295062/na64_status_2017.pdf. ПРHD = 25,00
3. Kirsanov M. Search for dark sector physics in missing energy events with NA64 // 18th Lomonosov Conference, Moscow, Russia, 24-27 August, 2017, устный. http://www.icas.ru/english/LomCon/18lomcon/18LomCon_programme.htm. ПРHD = $15/10 = 1,50$
4. Gninenko S. Search for Dark Sectors at Fixed-Target Experiments // , Marseille, France, 1-3 October, 2018, устный. <https://indico.cern.ch/event/725682/timetable/?print=1&view=standard>. ПРHD = 25,00
5. Gninenko S. NA64 Status and Plans // Open SPCS Meeting, CERN, Geneva, Switzerland, 7-8 June, 2018, устный. https://indico.cern.ch/event/730078/contributions/3008243/attachments/1663235/2665515/na64_status_2018.pdf. ПРHD = 25,00

Препринты:

1. Anastassopoulos V. et al. (CAST Collaboration). Improved Search for Solar Chameleons with a GridPix Detector at CAST // arXiv:1808.00066 [hep-ex], 2018. ПРHD = $3 \cdot 0,075 = 0,23$

2. Gninenko S.N., Kirpichnikov D.V., Krasnikov N.V. Probing millicharged particles with NA64 experiment at CERN // arXiv:1810.06856 [hep-ph], 2018. ПРНД = $3/3 = 1,00$
3. Demidov S., Gninenko S., Gorbunov D. Light hidden photon production in high energy collisions // arXiv:1812.02719 [hep-ph], 2018. ПРНД = $3/3 = 1,00$
4. Caldwell A. et al. Particle physics applications of the AWAKE acceleration scheme // arXiv:1812.11164 [physics.acc-ph], 2018. ПРНД = $3*0,100 = 0,30$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 647,48

Дерменев Александр Владимирович, род. 20.06.1983, мнс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

1. Banerjee D. et al. (NA64 Collaboration). Search for invisible decays of sub-GeV dark photons in missing-energy events at the CERN SPS // Phys.Rev.Lett. 118: 1, 011802, 2017. ПРНД = $8,839*30*0,100 = 26,52$
2. Chatrchyan S. et al. (CMS Collaboration). Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 50-71, 2017. ПРНД = $4,254*30*0,007 = 0,89$
3. Antonello M. et al. Muon momentum measurement in ICARUS-T600 LAr-TPC via multiple scattering in few-GeV range // JINST 12: 304010, 2017. ПРНД = $1,258*30*0,075 = 2,83$
4. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРНД = $4,254*30*0,007 = 0,89$
5. Depero E. et al. High purity 100 GeV electron identification with synchrotron radiation // Nucl.Instrum.Meth.A 866: 196-201, 2017. ПРНД = $1,336*30*0,100 = 4,01$
6. Anastassopoulos V. et al. (CAST Collaboration). New CAST Limit on the Axion-Photon Interaction // Nature Phys. 13: 584-590, 2017. ПРНД = $22,727*30*0,075 = 51,14$
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9. Banerjee D. et al. (NA64 Collaboration). Search for vector mediator of Dark Matter production in invisible decay mode // Phys.Rev.D97: no.7, 072002, 2018. ПРНД = $4,394*30*0,100 = 13,18$
10. Banerjee D. et al. (NA64 Collaboration). Search for a Hypothetical 16.7 MeV Gauge Boson and Dark Photons in the NA64 Experiment at CERN // Phys.Rev.Lett. 120: no.23, 231802, 2018. ПРНД = $8,839*30*0,100 = 26,52$
11. Chatrchyan S. et al. (CMS Collaboration). Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics // JINST 12: P12034, 2017. ПРНД = $1,258*30*0,007 = 0,26$

Доклады:

1. Kirsanov M. Search for dark sector physics in missing energy events with NA64 // 18th Lomonosov Conference, Moscow, Russia, 24-27 August, 2017, устный.
http://www.icas.ru/english/LomCon/18lomcon/18LomCon_programme.htm. ПРНД = $15/10 = 1,50$

Препринты:

1. Anastassopoulos V. et al. (CAST Collaboration). Improved Search for Solar Chameleons with a GridPix Detector at CAST // arXiv:1808.00066 [hep-ex], 2018. ПРНД = $3 \cdot 0,075 = 0,23$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 419,85

Кирсанов Михаил Михайлович, род. 25.07.1960, кфмн, снс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

1. Banerjee D. et al. (NA64 Collaboration). Search for invisible decays of sub-GeV dark photons in missing-energy events at the CERN SPS // Phys.Rev.Lett. 118: 1, 011802, 2017. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$

2. Chatrchyan S. et al. (CMS Collaboration). Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 50-71, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$

3. Antonello M. et al. Muon momentum measurement in ICARUS-T600 LAr-TPC via multiple scattering in few-GeV range // JINST 12: 304010, 2017. ПРНД = $1,258 \cdot 30 \cdot 0,075 = 2,83$

4. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$

5. Depero E. et al. High purity 100 GeV electron identification with synchrotron radiation // Nucl.Instrum.Meth.A 866: 196-201, 2017. ПРНД = $1,336 \cdot 30 \cdot 0,100 = 4,01$

6. Chatrchyan S. et al. (CMS HCAL Collaboration). Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam // JINST 13: P01002, 2018. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$

7. Gninenko S.N., Kirpichnikov D.V., Kirsanov M.M., Krasnikov N.V. The exact tree-level calculation of the dark photon production in high-energy electron scattering at the CERN SPS // Phys.Lett.B82: 406-411, 2018. ПРНД = $4,254 \cdot 30/4 = 31,91$

8. Banerjee D. et al. (NA64 Collaboration). Search for a Hypothetical 16.7 MeV Gauge Boson and Dark Photons in the NA64 Experiment at CERN // Phys.Rev.Lett. 120: no.23, 231802, 2018. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$

9. Chatrchyan S. et al. (CMS Collaboration). Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics // JINST 12: P12034, 2017. ПРНД = $1,258 \cdot 30 \cdot 0,007 = 0,26$

Доклады:

1. Kirsanov M. Search for heavy neutrinos in CMS // 2nd CMS Workshop "Perspectives on Physics and on CMS at HL-LHC", Varna, Bulgaria, 29 August - 1 September, 2017, устный. <http://cms-varna2017.jinr.ru/program/>. ПРНД = 25,00

2. Kirsanov M. Search for dark sector physics in missing energy events with NA64 // 18th Lomonosov Conference, Moscow, Russia, 24-27 August, 2017, устный. http://www.icas.ru/english/LomCon/18lomcon/18LomCon_programme.htm. ПРНД = $10 + 15/10 = 11,50$

3. Kirsanov M. Search for a new X boson and Dark Photons in NA64 at the CERN SPS // QUARKS-2018, 20th International Seminar on High Energy Physics, Valday, Russia, 27 May - 2 June, 2018, устный.

https://q2018.inr.ac.ru/event/1/contributions/47/attachments/133/138/DM_Quarks2018.pdf.

ПРНД = 25,00

4. Kirsanov M. Search for Dark Matter in CMS at the LHC // QUARKS-2018, 20th International Seminar on High Energy Physics, Valday, Russia, 27 May - 2 June, 2018, устный.

https://q2018.inr.ac.ru/event/1/contributions/47/attachments/133/138/DM_Quarks2018.pdf.

ПРНД = 25,00

5. Kirsanov M. Search for subGeV dark sector particles with NA64 experiment at the CERN SPS // The 14th international workshop on the "Dark Side of the Universe 2018", Annecy-le-Vieux, France, 25-29 June, 2018, устный. <https://indico.in2p3.fr/event/14719/sessions/9592/#20180626>.

ПРНД = 25,00

6. Kirsanov M. Search for WR and Heavy Neutrino in CMS // 20th Annual RDMS CMS Collaboration Conference, Tashkent, Uzbekistan, 12-15 September, 2018, устный.

<https://indico.cern.ch/event/754760/sessions/285807/#20180912>. ПРНД = 25,00

+ **Общий список** (см.стр.11)

Итого: ПРНД = 518,21

Климай Петр Александрович, род. 18.08.1984, кфмн, мнс ОФВЭ, ПРНД за 2017-2018 гг.

Доклады:

1. Petkov V. Multimessenger search for evaporating primordial black holes // Международная конференция "Сверхновая SN 1987A, кварковый фазовый переход в компактных объектах и многоволновая астрономия", Терскол, Россия, 2 - 8 июля, 2017, устный.

https://www.sao.ru/hq/grb/conf_2017/program-ru.html. ПРНД = $15/3 = 5,00$

Публикация докладов в трудах конференции:

1. Petkov V.B., Bugaev E.V., Klimai P.A. Multimessenger search for evaporating primordial black holes // Proceedings of The International Conference "SN 1987A, Quark Phase Transition in Compact Objects and Multimessenger Astronomy", Russia, Terskol (BNO INR RAS), Nizhnij Arkhyz (SAO RAS), 2-8 July 2017, INR RAS, Moscow, 2018. P.158-164. (фактор 1,5 - эксперименты проводятся в России). ПРНД = $1,5 \cdot 8/3 = 4,00$

Итого: ПРНД = 9,00

Корнеев Антон Евгеньевич, род. 30.01.1983, мнс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

1. Vanerjee D. et al. (NA64 Collaboration). Search for invisible decays of sub-GeV dark photons in missing-energy events at the CERN SPS // Phys.Rev.Lett. 118: 1, 011802, 2017. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$

2. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017. ПРНД = $4,254 \cdot 30 \cdot 0,007 = 0,89$

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7. Banerjee D. et al. (NA64 Collaboration). Search for a Hypothetical 16.7 MeV Gauge Boson and Dark Photons in the NA64 Experiment at CERN // Phys.Rev.Lett. 120: no.23, 231802, 2018. ПРНД = $8,839 \cdot 30 \cdot 0,100 = 26,52$
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Конструкторская документация:

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2. Линейка кремниевых фотоумножителей. Программа и методика испытаний МАГД.432233.001ПМ. ПРНД = $3/1 = 3,00$
3. Стенд измерения вольт-амперных характеристик кремниевых фотоумножителей. Руководство пользователя МАГД.411728.001ИЗ. ПРНД = $3/1 = 3,00$
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5. Стенд измерения импеданса кремниевых фотоумножителей. Руководство пользователя МАГД.411733.002ИЗ. ПРНД = $3/1 = 3,00$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 418,85

Тлисов Данила Анатольевич, род. 20.07.1983, кфмн, мнс ОФВЭ, ПРНД за 2017-2018 гг.

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2. Tlison D. Electroweak Mixing at CMS today and after Phase 2 Upgrade // 20th Annual RDMS CMS Collaboration Conference, Tashkent, Uzbekistan, 12-15 September, 2018, устный. <https://indico.cern.ch/event/754760/timetable/#20180912.detailed>. ПРНД = $10 + 15/4 = 13,75$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 389,89

Торопин Александр Николаевич, род. 29.03.1951, кфмн, снс ОФВЭ, ПРНД за 2017-2018 гг.

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http://www.icas.ru/english/LomCon/18lomcon/18LomCon_programme.htm. ПРНД = $15/10 = 1,50$

+ **Общий список** (см.стр.11)

Итого: ПРНД = 365,66

Голубев Николай Александрович, род. 14.01.1952, кфмн, снс ОФВЭ, ПРНД за 2017-2018 гг.

Статьи:

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2. Khachatryan V. et al. (CMS Collaboration). Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge

couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B770: 380-402, 2017.

ПРHD = $4,254 \cdot 30 \cdot 0,007 = 0,89$

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+ **Общий список** (см.стр.11)

Итого: ПРHD = 293,70

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8. Khachatryan V. et al. (CMS Collaboration). Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at $\sqrt{s} = 8$ TeV // JHEP 1702: 96, 2017. ПРHD = $5,541 \cdot 30 \cdot 0,007 = 1,16$

9. Khachatryan V. et al. (CMS Collaboration). Evidence for collectivity in pp collisions at the LHC // Phys.Lett.B765: 193-220, 2017. ПРHD = $4,254 \cdot 30 \cdot 0,007 = 0,89$

10. Khachatryan V. et al. (CMS Collaboration). Observation of the decay $B^+ \rightarrow \psi(2S) \phi(1020) K^+$ in pp collisions at $\sqrt{s} = 8$ TeV // Phys.Lett.B764: 66-86, 2017. ПРHD = $4,254 \cdot 30 \cdot 0,007 = 0,89$

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23. Khachatryan V. et al. (CMS Collaboration). Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at $\sqrt{s} = 13$ TeV // Phys.Rev.D95: no.1, 012011, 2017. ПPHД = $4,394 \cdot 30 \cdot 0,007 = 0,92$
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26. Sirunyan A.M. et al. (CMS Collaboration). Cross section measurement of t-channel single top quark production in pp collisions at $\sqrt{s} = 13$ TeV // Phys.Lett.B772: 752-776, 2017. ПPHД = $4,254 \cdot 30 \cdot 0,007 = 0,89$
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38. Sirunyan A.M. et al. (CMS Collaboration). Relative Modification of Prompt $\Upsilon(2S)$ and J/ψ Yields from pp to PbPb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV // Phys.Rev.Lett. 118: no.16, 162301, 2017. $\text{IPHD} = 8,839 \cdot 30 \cdot 0,007 = 1,86$
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Итого: ПРHD = 287,61

Документ создан автоматически. Версия 8.00