

Бажанов Николай Аркадьевич (ЛЯП, Сектор низких температур) список научных работ за период с 1986 по 2020 гг. (данные на 20.06.2020), из них 42 в реферируемых журналах. В списке 108 научных работ (из них 3 с 2017 года).

**1) НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ ЦЕНТР  
«КУРЧАТОВСКИЙ ИНСТИТУТ»  
ИНСТИТУТ ФИЗИКИ ВЫСОКИХ ЭНЕРГИЙ имени А.А. ЛОГУНОВА  
Концептуальный проект эксперимента СПАСЧАРМ**

Список участников сотрудничества СПАСЧАРМ

В.В. Абрамов, И.Л. Ажгирей, В.И. Бармин, Н.И. Беликов, А.А. Борисов, С.И. Букреева, А.Н. Васильев, В.И. Гаркуша, Ю.М. Гончаренко, А.А. Деревщиков, В.Н. Запольский, В.Г. Заручейский, Н.К. Калугин, В.А. Качанов, А.С. Кожин, В.А. Кормилицын, А.К. Лиходед, Е.В. Маслова, В.А. Маишеев, Ю.М. Мельник, А.П. Мещанин, Н.Г. Минаев, В.В. Моисеев, Д.А. Морозов, В.В. Мочалов, К.Д. Новиков, Л.В. Ногач, А.О. Орешков, В.С. Петров, С.В. Пославский, А.Ф. Прудкогляд, С.В. Рыжиков, А.В. Рязанцев, П.А. Семенов, В.А. Сенько, С.Р. Слабоспицкий, М.М. Солдатов, Л.Ф. Соловьев, А.В. Узунян, Р.М. Фахрутдинов, Н.А. Шаланда, В.И. Якимчук, А.Е. Якутин

НИЦ «Курчатовский Институт» – ИФВЭ, г. Протвино Московской области

Н.А. Бажанов, Н.С. Борисов, С.В. Голоскоков, И.С. Городнов, А.С. Должиков, А.Б. Лазарев, А.Б. Неганов, Ю.А. Плис, О.В. Теряев, А.Н. Фёдоров, Ю.А. Усов, Ю.Н. Узиков

Объединенный Институт Ядерных Исследований, г. Дубна Московской области

А.А. Богданов, А.В. Клепиков, М.Б. Нурушева, В.А. Окороков, М.Ф. Рунцо, В.Л. Рыков, В.М. Самсонов, М.Н. Стриханов

Национальный Исследовательский Ядерный Университет – МИФИ, г. Москва

И.Г. Алексеев, Б.В. Морозов, В. М. Нестеров, В.В. Рыльцов, Д. Н. Свирида, В.В. Тясин

НИЦ «Курчатовский Институт» – ИТЭФ, г. Москва

В.А. Андреев, А.Б. Гриднев, Н.Г. Козленко, Д.В. Новинский, В.В. Сумачёв

НИЦ «Курчатовский Институт» – ПИЯФ, г. Гатчина Ленинградской обл.

В.И. Криворучко, ФГУП, НПП «ИСТОК», г. Фрязино Московской области

Интерес к участию в эксперименте с поляризованным пучком и готовность участвовать в эксперименте<sup>1</sup> высказали группы Карлова Университета (г. Прага, Чехия – руководитель М. Фингер) и Университета Триеста (Италия – руководитель Ф. Брадаманте), Университет Майнц, Университет Бонн, Университет Бохум (все Германия)

1 Включая возможное участие в создании и изготовление установки

Препринт ИФВЭ, 2019 – 12, Протвино, 2019 (всего 75 соавторов)

2) Abramov, V.V. The Status of SPASCHARM Experiment with Polarized Target at U-70 Accelerator / V.V.Abramov, N.A.Bazhanov, N.S.Borisov, A.N.Fedorov, I.S.Gorodnov, A.B.Lazarev, A.B.Neganov, Y.A.Plis, Y.A.Usov [a.o.] // XVII Advanced Research Workshop on High Energy Spin Physics (DSPIN-17), Dubna, Sept. 11-15, 2017 = XVII Рабочее совещание по физике спина при высоких энергиях : Abstracts / Advanced Research Workshop on High Energy Spin Physics (17; 2017; Dubna). – Dubna : JINR, 2017. – p.32. – (JINR ; E1,2-2017-56).

**3) Study of single-spin asymmetries with polarized target at the SPASCHARM experiment at U70 accelerator**

**V.V. Abramov (Serpukhov, IHEP) et al.** 2017. 5 pp.

Published in **J.Phys.Conf.Ser. 798 (2017) no.1, 012096** (40 authors listed)

1) Systematic Study of Spin Effects at SPASCHARM Experiment at 70-GeV Accelerator in Protvino

SPASCHARM Collaboration (V.V. Mochalov (Serpukhov, IHEP & Moscow Phys. Eng. Inst.) et al.). 2016. 7 pp.

Published in **Int.J.Mod.Phys.Conf.Ser. 40 (2016) no.01, 1660106** (16 authors listed)

2) Study of single-spin asymmetries with polarized target at the SPASCHARM experiment at U70 accelerator

V.V. Mochalov (Serpukhov, IHEP & Moscow Phys. Eng. Inst.) et al.. 2016. 6 pp.

Published in **J.Phys.Conf.Ser. 678 (2016) no.1, 012048** (36 authors listed)

3) Analyzing Power in the Reaction  $p+p \uparrow \rightarrow \pi^0 + X$   $p+p \uparrow \rightarrow \pi^0 + X$  in the polarized-target fragmentation region at an energy of 50 GeV

V.V. Abramov (Serpukhov, IHEP) et al.. 2014. 7 pp.

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**4) Preparation of new polarization experiment SPASCHARM at IHEP.**

V.V. Abramov et al. 2011. 8pp.

Published in **J.Phys.Conf.Ser.295:012018,2011. (34 authors listed)**

5) PNPI polarized target for pion-nucleon scattering measurements at intermediate energies. D.V. Novinsky et al. 2011. 4pp. Published in Proc. 14th International Workshop on Polarized Sources, Targets and Polarimetry (PSTP 2011), 12-16 September 2011, St.Petersburg, Russia, eds. K. Grigoryev, P. Kravtsov and A. Vasilyev, ISBN 978-5-86763-282-3, (2011), pp. 127-130. (19 authors listed)

**6) Spin physics program At IHEP-protvino.**

V.V. Mochalov et al. 2009. 8pp.

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**7) The First Stage of Polarization Program Spascharm at the Accelerator U-70 of Ihep.** V.V. Abramov et al. Dec 2009. 8pp.

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XIII Рабочее совещание по физике спина при высоких энергиях : Proceedings/ Advanced Research Workshop on High Energy Spin Physics (13; 2009; Dubna); Ed.: A.V.Efremov, Goloskokov S.V.- Dubna: JINR, 2010.-p.274-281 .- Bibliogr.:14. **(44 authors listed)**

**8) The Completion of Single-Spin Asymmetry Measurements at the Proza Setup.** [V.V. Mochalov et al.](#) Dec 2009. 6pp.

Talk given at 13th Workshop on High Energy Spin Physics (DSPIN-09), Dubna, Moscow Region, Russia, 1-5 Sep 2009. e-Print: [arXiv:0912.5059](#) [hep-ex]  
XIII Рабочее совещание по физике спина при высоких энергиях : Proceedings/ Advanced Research Workshop on High Energy Spin Physics (13; 2009; Dubna); Ed.: A.V.Efremov, Goloskokov S.V.- Dubna: JINR, 2010.-p.250-255 .- Bibliogr.:19. **(26 authors listed)**

**9) Asymmetry measurements in the elastic pion-proton scattering in the resonance energy range.** [I.G. Alekseev et al.](#) Nov 2008. 3pp.

Prepared for 18th International Conference on Particles and Nuclei (PANIC 08), Eilat, Israel, 9-14 Nov 2008. Published in \*Eilat 2008, Particles and nuclei (PANIC08)\* 333-335 **(19 authors listed)**

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[V.V. Sumachev et al.](#) 2008. 8pp.

Published in **AIP Conf.Proc.1056:388-395,2008.** **(22 authors listed)**

**11) Backward asymmetry measurements in the elastic pion-proton scattering at resonance energies.** By ITEP-PNPI Collaboration ([I.G. Alekseev et al.](#)). Oct 2008. 6pp. Published in **Eur.Phys.J.A39:163-168,2009.**

e-Print: [arXiv:0810.1143](#) [hep-ex] **(19 authors listed)**

12. V.V. Sumachev, I.G. Alekseev, N.A. Bazhanov, V.S. Bekrenev, Yu.A. Beloglazov et al. Parameters A and R measurements in the resonance region of the pion-nucleon elastic scattering: Proceedings of the 11th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon (IKP, Forschungszentrum Jülich, Germany, 10-14 September 2007), Jülich Forschungszentrum, 2008, p. 392.

**13) New Polarization Program at U70 (SPASCHARM Project).**

[A.N. Vasiliev et al.](#) Dec 2007. 8pp.

e-Print: [arXiv:0712.2691](#) [hep-ex] **(43 authors listed)**

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**14) The Comparative Study of the Inclusive pi0 Analyzing Power in Reactions p+p(pol) ---> pi0 + X and pi- + p(pol) ---> pi0 + X at 50 and 40-Gev/C Respectively.**

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e-Print: [arXiv:0712.2677](#) [hep-ex] **(27 authors listed)**

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**15) Deuteron frozen spin polarized target for nd experiments at the VdG accelerator of Charles University.** [N.S. Borisov et al.](#) Dec 2007. 10pp.

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e-Print: **arXiv:0712.1314** [nucl-ex] **(22 authors listed)**

**16) Asymmetry measurement in the elastic pion-proton scattering at 1.94-GeV/c and 2.07-GeV/c.** Igor G. Alekseev *et al.* 2007. 4pp.

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**18)The experimental investigation of the missing N\* and Delta resonances problem: Current status and perspectives.**

By PNPI-ITEP Collaboration (V.V. Sumachev *et al.*). Jul 2006. 4pp.  
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XI Advanced Research Workshop on High Energy Spin Physics (DUBNA – SPIN-05), Proceedings. (19 authors listed)

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**21) Measurement of the spin rotation parameter A in the elastic pion-proton scattering at 1.43-GeV/c.** I.G. Alekseev *et al.* Oct 2005. 4pp.

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**(18 authors listed)**

**22) Measurements of energy behaviours of spin-dependent n p observables over 1.2-GeV - 3.7-GeV energy region.** V.I. Sharov *et al.* 2005.

Prepared for Advanced Studies Institute Conference on Symmetries and Spin (SPIN-Praha-2004), Prague, Czech Republic, 5-10 Jul 2004.

Published in **Czech.J.Phys.55:A289-A305,2005**. Also in \*Prague 2004, Symmetries and spin\* A289-A305 **(74 authors listed)**

Релятивистская ядерная физика: от сотен МэВ до ТэВ: 8-е Международное совещание: Proceedings of the Workshop.- Dubna: JINR, 2006.-p.118-135 .- Bibliogr.:13.

XI Рабочее совещание по физике спина при высоких энергиях: Proc./ Advanced Research Workshop on High Energy Spin Physics (11; 2005; Dubna); Ed.: Efremov A.V., Goloskokov S.V.- Dubna: JINR, 2006.-p.424-430 .- Bibliogr.:12.

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Physics and Quantum Chromodynamics = Релятивистская ядерная физика и квантовая хромодинамика : Proc. of the XVI International Baldin Seminar on High Energy Physics Problems (ISHEPP XVI), Dubna, June 10-15, 2002/ Ed.: Sissakian A.N. et al.- Dubna: JINR.- (JINR; E1,2-2004-76) . - Vol.2 .- 2004.-p.90-95 .- Bibliogr.:15. **(74 authors listed)**

**24) Results for the asymmetry measurement in elastic pion proton scattering at 1.78-GeV/c and 2.07-GeV/c.** I.G. Alekseev *et al.* Oct 2004. 4pp.

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25) Results for Asymmetry Measurement in the Elastic Pion-Proton Scattering in the Region of Differential Cross Section Minimum/ I.G.Alekseev *et al.* // Advanced Research Workshop on High Energy Spin Physics (NATO ARW DUBNA-SPIN-03) (10; 2003; Dubna)= Рабочее совещание по физике спина при высоких энергиях: Proceedings, Dubna, Sept. 16-20, 2003/ Ed.: Efremov A.V., Teryaev O.V.- Dubna: JINR, 2004.-p.316-319 .- Bibliogr.:6.

**26) Program of measurement of the asymmetry P at the minima of the differential cross section for elastic pi+ p scattering.** Yu.A. Beloglazov *et al.* 2005. 6pp.

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**27) Experimental setup for measuring P asymmetry in the resonance region of elastic pion proton scattering.** Yu.A. Beloglazov *et al.* 2005. 7pp.

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**28) Measurements of energy behaviours of spin-dependent neutron proton observables over a GeV region.** V.I. Sharov *et al.* 2004.

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Proceedings, Dubna, Sept. 16-20, 2003/ Ed.: Efremov A.V., Teryaev O.V.- Dubna: JINR,

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**29) Measurement of the spin rotation parameter A in the elastic pion proton scattering at 1.43-GeV/c.** I.G. Alekseev *et al.* 2004. 4pp.

Prepared for Hadron 03: 10th International Conference on Hadron Spectroscopy, Aschaffenburg, Germany, 31 Aug - 6 Sep 2003.

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**30) Measurements of the total cross-section difference Delta(sigma(L)(n p)) at 1.39-GeV, 1.69-GeV, 1.89-GeV and 1.99-GeV.**

V.I. Sharov *et al.* JINR-E1-2004-87, Jun 2004. 25pp.

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**31) Measurement of the n p total cross section difference  $\Delta(\sigma(L))(np)$  at 1.39-GeV, 1.69-GeV, 1.89-GeV and 1.99-GeV.** V.I. Sharov *et al.* 2004. 12pp.  
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**32) Polarization parameters of elastic p p scattering in the angular range 22.5-degrees - 42.5-degrees at an energy of 1-GeV and partial-wave analysis of data.** V.A. Andreev *et al.* 2004. 11pp.  
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**33) Measurement of spin-rotation parameters in elastic  $\pi^+$  p scattering at a momentum of 1.62-GeV/c and calibration of a carbon polarimeter.** Yu.A. Beloglazov *et al.* 2004. 9pp.  
Prepared for Nuclear Physics Department of Russian Academy of Sciences Conference on Physics of Fundamental Interactions (NPD 2002), Moscow, Russia, 2-6 Dec 2002.  
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(19 authors listed)

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35) The PNPI-ITEP Experimental Setup for the Asymmetry of the Elastic Pion-Proton Scattering Measurement in the Resonance Region/ E.A.Filimonov *et al.* // Advanced Research Workshop on High Energy Spin Physics (NATO ARW DUBNA-SPIN-03) (10; 2003; Dubna)= Рабочее совещание по физике спина при высоких энергиях: Proceedings, Dubna, Sept. 16-20, 2003/ Ed.: Efremov A.V., Teryaev O.V.- Dubna: JINR, 2004.-p.372-375.- Bibliogr.:8.

36) Investigations of Parity Violation and Interference Effects in Fission of  $^{239}\text{Pu}$  Induced by Resonance Neutrons/ A.M.Gagarski *et al.* // Neutron Spectroscopy, Nuclear Structure, Related Topics: X Intern. Seminar on Interaction of Neutrons with Nuclei (ISINN-10), Dubna, 22-25 May 2002= Нейтронная спектроскопия, Структура атомного ядра и связанные вопросы. X Международный семинар по взаимодействию нейтронов с ядрами: Proc.- Dubna: JINR, 2003.-p.184-195.- Bibliogr.:20.

**37) New results on spin rotation parameter A in the  $\pi$  p elastic scattering in the resonance region.** I.G. Alekseev *et al.* 2003. 5pp.  
Prepared for 15th International Spin Physics Symposium (SPIN 2002), Long Island, New York, 9-14 Sep 2002. Published in *AIP Conf.Proc.675:558-562,2003.* Also in \*Upton/Danvers 2002, Spin 2002\* 558-562 (19 authors listed)

**38) Dubna 'Delta-Sigma' experiment: Results of treatment and analysis of statistics accumulated in 2001 data taking run on energy dependence of  $\Delta(\sigma(L))(np)$ .** V.I. Sharov *et al.* 2003. 6pp.  
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**39) Dubna 'DELTA-SIGMA' experiment. Preliminary results on energy dependence of Delta ( $\sigma(L)(n p)$ ) between 1.2-GeV - 3.7-GeV for 2001 data taking run.**

[V.I. Sharov et al.](#) 2003.

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40) Investigations of the Space Parity Violation and Interference Effects in the Fragment Angular Distributions of  $^{239}\text{Pu}$  Fission by Resonance Neutrons A.M.Gagarski et al. X International Seminar on Interaction of Neutrons with Nuclei. NEUTRON SPECTROSCOPY, NUCLEAR STRUCTURE, RELATED TOPICS Dubna, May 22-25, 2002 (21 authors listed)

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V.A.Andreev et al. PINF-2002, 2475 pp.24. (16 authors listed)

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**44) New experimental results on the pion nucleon interaction investigation in the resonance region. [V.V. Sumachev et al.](#) 2002.**

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**45) New results of Delta( $\sigma(L)(n p)$ ) at high energies. [V.I. Sharov et al.](#) 2002.**

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Prepared for Advanced Studies Institute on Symmetries and Spin (PRAHA SPIN 2001), Prague, Czech Republic, 15-28 Jul 2001.

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**48) Measurements of the spin rotation parameter A in the elastic pion proton scattering in the D(13)(1700) resonance region. [I.G. Alekseev et al.](#) 2001.**

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**49) Measurements of energy behaviour of spin-dependent n p observables over a GeV region: Results and prospects.** [V.I. Sharov et al.](#) 2001.

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N.A. Bajanov, Yu.S. Blinnikov, Yu.I. Gusev, T.Yu. Klechneva et al. (14 authors listed)

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