

LIST OF SELECTED PUBLICATIONS BY VADIM A. BEDNYAKOV

(2018—2013)

1. Coherency and incoherency in neutrino-nucleus elastic and inelastic scattering.
By Vadim A. Bednyakov, Dmitry V. Naumov.
ArXiv:1806.08768. Submitted to PRD.
2. JINR in the ATLAS experiment. Years 1992-2015.
By V.A.Bednyakov, Yu.A.Budagov, N.A.Russakovich, A.P.Cheplakov,
V.V.Kukhtin, G.A.Chelkov and E.V.Khramov.
Book. 280 pp. JINR Publishing department, Dubna, 2018.
3. The Joint Institute for Nuclear Research in Experimental Physics of Elementary
Particles.
By V.A. Bednyakov, N.A. Russakovich. Phys.Part.Nucl. 49 (2018) no.3, 331-
373.
Объединенный институт ядерных исследований в экспериментальной
физике элементарных частиц
By V.A. Bednyakov, N.A. Rusakovich. Брошюра на русском.
4. Constraints on the intrinsic charm content of the proton from recent ATLAS
data.
By V.A. Bednyakov, S.J. Brodsky, A.V. Lipatov, G.I. Lykasov, M.A. Malyshev,
J. Smiesko, S. Tokar.
ArXiv:1712.09096. Submitted to PRL.
5. Prospects for identification the direct and indirect effects of extra spatial
dimensions at the Large Hadron Collider.
By A.A. Pankov, I.A. Serenkova, A.V. Tsytrinov, V.A. Bednyakov.
Phys.Part.Nucl. 48 (2017) no.3, 415-454.
6. The Physics of Heavy Quark Distributions in Hadrons: Collider Tests
By S.J. Brodsky, V.A. Bednyakov, G.I. Lykasov, J. Smiesko, S. Tokar.
ArXiv:1612.01351, Prog.Part.Nucl.Phys. 93 (2017) 108.
7. Anomalously interacting Z^* bosons: an example of JINR's contribution to
physics at LHC.

By V.A. Bednyakov, I.V. Yeletsikh, M.V. Chizhov, I.R. Boyko.
Phys.Usp. 59 (2016) no.4, 403-410, Usp.Fiz.Nauk 186 (2016) no.4, 425-433.

8. Probing proton intrinsic charm in photon or Z boson production accompanied by heavy jets at the LHC. By A.V. Lipatov, G.I. Lykasov, Yu. Yu. Stepanenko, V.A. Bednyakov.
ArXiv:1606.04882, Phys.Rev. D94 (2016) no.5, 053011.
9. Neutrino physics and JINR.
By V.A. Bednyakov, D.V. Naumov, O.Yu. Smirnov.
Phys.Usp. 59 (2016) no.3, 225-253.
10. Signatures of lower scale gauge coupling unification in the Standard Model due to extended Higgs sector.
By M.V. Chizhov, V.A. Bednyakov.
ArXiv:1509.07610,
Phys.Atom.Nucl. 79 (2016) no.5, 721-725.
11. Effects of Z-Z' mixing in double W-bosons production at the large hadron collider
By Vasili V. Andreev, A.A. Pankov, V.A. Bednyakov.
Phys.Atom.Nucl. 78 (2015) no.6, 725-739,
Yad.Fiz. 78 (2015) no.9, 775-790.
12. Searches for and identification of effects of extra spatial dimensions in dilepton and diphoton production at the Large Hadron Collider.
By A.A. Pankov, I.A. Serenkova, A.V. Tsytrinov, V.A. Bednyakov.
Phys.Atom.Nucl. 78 (2015) no.4, 463-476,
Yad.Fiz. 78 (2015) no.6, 499-513.
13. Is it possible to discover a dark matter particle with an accelerator?
By Vadim A. Bednyakov.
ArXiv:1505.04380, Phys.Part.Nucl. 47 (2016) no.5, 711-774.
14. Results of searches for Dubna resonance Z^* in dimuon channel in ATLAS data.
By I.V. Yeletsikh, V.A. Bednyakov.
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15. Search for intrinsic charm in vector boson production accompanied by heavy flavor jets.
By P-H. Beauchemin, V.A. Bednyakov, G.I. Lykasov, Yu. Yu. Stepanenko.
ArXiv:1410.2616, Phys.Rev. D92 (2015) no.3, 034014.
16. Hadron collider potential for excited bosons search.
By M.V. Chizhov, I.R. Boyko, V.A. Bednyakov, J.A. Budagov.
Phys.Part.Nucl. 45 (2014) no.3, 517-528.
17. Search for Z^* boson at ATLAS detector.
By I. Yeletsikh, V. Bednyakov, M. Chizhov.
Phys.Part.Nucl. 45 (2014) 254-256.
18. Neutrino Physics and Astrophysics at Joint Institute for Nuclear Research
By Vadim A. Bednyakov.
Nucl.Phys.Proc.Suppl. 245 (2013) 33-40.
19. The White Book: JINR NEUTRINO PROGRAM (Dubna: JINR Laboratory of Nuclear Problems).
Editors Bednyakov V. A. and Naumov D. V.
JINR Publishing department, 2014, 293 pp. <http://dlnp.jinr.ru/ru/neutrino-white-book>
20. Hadron collider potential for excited bosons search: A Snowmass whitepaper.
By M.V. Chizhov, V.A. Bednyakov, J.A. Budagov.,
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21. Saturation of gluon density and soft pp collisions at LHC.
By G.I. Lykasov, A.A. Grinyuk, V.A. Bednyakov.
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22. Searching for intrinsic charm in the proton at the LHC
By V.A. Bednyakov, M.A. Demichev, G.I. Lykasov, T. Stavreva, M. Stockton.
ArXiv:1305.3548, Phys.Lett. B728 (2014) 602-606.
23. First LHC Constraints on Anomalously Interacting New Vector Bosons.
By M.V. Chizhov, V.A. Bednyakov, I.R. Boyko, J.A. Budagov, M.A. Demichev,

I.V.
ArXiv:1110.5533.

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24. On resonance search in dilepton events at the LHC.
By M.V. Chizhov, V.A. Bednyakov, J.A. Budagov. ArXiv:1109.6876,
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25. One needs positive signatures for detection of Dark Matter, V. Bednyakov,"
Phys. Part. Nucl. **44** (2013) 220-228, 1207.2899.