

Vadim A. Naumov

List of Scientific Publications

BLTP, JINR, Dubna

February 16, 2022

Journal publications

1. I. Ruiz Simo, I. D. Kakorin, V. A. Naumov, K. S. Kuzmin, J. E. Amaro, Analysis of the kinematic boundaries of the quasielastic neutrino-nucleus cross section in the superscaling model with a relativistic effective mass, *Phys. Rev. D* **105** (2022) 013001 [arXiv:2102.05510 [hep-ph]].
2. GENIE Collaboration (J. Tena-Vidal *et al.*), Hadronization model tuning in GENIE v3, *Phys. Rev. D* **105** (2022) 012009 [arXiv:2106.05884 [hep-ph]].
3. GENIE Collaboration (L. Alvarez-Ruso *et al.*), Recent highlights from GENIE v3, *Eur. Phys. J. Spec. Top.* **230** (2021) 4449–4467 [arXiv:2106.09381 [hep-ph]].
4. I. D. Kakorin, K. S. Kuzmin, V. A. Naumov, Running axial mass of the nucleon as a phenomenological tool for calculating quasielastic neutrino–nucleus cross sections, *Eur. Phys. J. C* **81** (2021)1142 [arXiv:2112.13745 [hep-ph]].
5. GENIE Collaboration (J. Tena-Vidal *et al.*), *Neutrino-nucleon cross-section model tuning in GENIE v3*, *Phys. Rev. D* **104** (2021) 072009 [arXiv:2104.09179 [hep-ph]].
6. D. V. Naumov, D. S. Shkirmanov, Reactor Antineutrino Anomaly Reanalysis in Context of Inverse-Square Law Violation, *Universe* **7** (2021) 246.
7. D. V. Naumov, V. A. Naumov, D. S. Shkirmanov, Rephasing invariant for three-neutrino oscillations governed by a non-Hermitian Hamiltonian, *Symmetry* **12** (2020) 1285.
8. I. D. Kakorin, K. S. Kuzmin, V. A. Naumov, A unified empirical model for CCQE interactions of neutrino and antineutrino with nuclei, *Phys. Part. Nucl. Lett.* **17** (2020) 265–288.
9. D. V. Naumov and V. A. Naumov, Quantum-field theory of neutrino oscillations, *Fiz. Elem. Chast. Atom. Yadra* **51** (2020) 5-209 [Phys. Part. Nucl. **51** (2020) 1–106].
10. A. V. Akindinov *et al.* (P2O Proto-collaboration), Letter of interest for a neutrino beam from Protvino to KM3NeT/ORCA, *Eur. Phys. J. C* **79** (2019) 758 [arXiv:1902.06083 [physics.ins-det]]. Supplementary matters can be found at URL: <http://theor.jinr.ru/NeutrinoOscillations/P20.html>.
11. D. V. Naumov, V. A. Naumov, and D. S. Shkirmanov, Quantum field theoretical description of neutrino oscillations and reactor antineutrino anomaly, *Fiz. Elem. Chast. Atom. Yadra* **48** (2017) 992–995 [Phys. Part. Nucl. **48** (2017) 1007–1010].

12. K. S. Kuzmin, V. A. Naumov, and O. N. Petrova, Quasielastic neutrino-nucleus interactions with running axial mass of the nucleon, *Fiz. Elem. Chast. Atom. Yadra* **48** (2017) 971–975 [*Phys. Part. Nucl.* **48** (2017) 995–997]
13. D. V. Naumov, V. A. Naumov, and D. S. Shkirmanov, Inverse-square law violation and reactor antineutrino anomaly, *Fiz. Elem. Chast. Atom. Yadra* **47** (2016) 1884–1897 [*Phys. Part. Nucl.* **48** (2017) 12–20] [arXiv:1507.04573 [hep-ph]].
14. K. S. Kuzmin, V. A. Naumov, and O. N. Petrova, Running axial mass of the nucleon for the $\text{NO}\nu\text{A}$ experiment, *Acta Phys. Polon. B Supp.* **9** (2016) 795–796.
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Publications in conference proceedings

1. N. A. Balashov, I. D. Kakorin, and V. A. Naumov, Accelerating personal computations with HTCondor: large number events generation with GENIE (a plenary talk), in Proceedings of the 27th International Symposium Nuclear Electronics and Computing 'NEC-2019' (Budva, Becici, Montenegro, September 30 – October 4, 2019), Edited by V. Korenkov *et al.*, pp. 135–141.
2. V. A. Naumov, Neutrino oscillations, A lecture given at the V International Pontecorvo Neutrino Physics School, Alushta, Crimea, Ukraine, September 6–16, 2012, URL: <http://pontecorvosch.jinr.ru/Lectures/Naumov-NuOscillations.pdf>.
3. V. A. Naumov, Seesaw mechanism of neutrino mass generation, A lecture given at the V International Pontecorvo Neutrino Physics School, Alushta, Crimea, Ukraine, September 6–16, 2012, URL: <http://pontecorvosch.jinr.ru/Lectures/Naumov-Seesaw.pdf>.
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11. V. A. Naumov, T. S. Sinegovskaya, and S. I. Sinegovsky, On measurement of the prompt muon fluxes with NT-2000, in: *Proceedings of the Third Baikal School on Fundamental Physics for Young Researchers “Physics of Big Natural Systems”*, (Irkutsk State University, Irkutsk, 2000), pp. 127–133 [in Russian].
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15. The NESTOR Collaboration (E. G. Anassontzis *et al.*, presented by S. Bottai), NESTOR: A status report, in: *Proceedings of the 26th International Cosmic Ray Conference*, Salt Lake City, Utah, August 17–25, 1999, edited by D. Kieda, M. Salamon, and B. Dingus, Vol. 2, pp. 456–459.
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