**Vadim A. Naumov**

**List of Scientific Publications**

BLTP, JINR, Dubna
October 23, 2024

## Journal publications

1. I. D. Kakorin, V. A. Naumov, and O. B. Samoylov, Test of the model of "running axial mass" using NOvA near detector data on muon neutrino scattering on nuclei, Pis'ma v Zh. Eksp. Teor. Fiz. **119** (2024) 785–795 [JETP Lett. **119** (2024) 813–822.

2. GENIE Collaboration (W. Li *et al.*), First combined tuning on transverse kinematic imbalance data with and without pion production constraints, Phys. Rev. D **1105** (2024) 072016 [FERMILAB-PUB-24-0122-CSAID-PPD; arXiv:2404.08510 [hep-ex]].

3. V. A. Naumov and D. S. Shkirmanov, Virtual neutrino propagation at short baselines, Eur. Phys. J. C bf 82 (2022) 736 [arXiv:2208.02621 [hep-ph]].

4. GENIE Collaboration (J. Tena-Vidal *et al.*), Neutrino-nucleus CC0$\pi$ cross-section tuning in GENIE v3, Phys. Rev. D **106** (2022) 112001 [FERMILAB-PUB-22-296-ND-QIS-SCD; arXiv:2206.1105 [hep-ph]].

5. I. D. Kakorin, K. S. Kuzmin, and 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]].

6. GENIE Collaboration (L. Alvarez-Ruso *et al.*), Recent highlights from GENIE v3, Eur. Phys. J. Spec. Top. **230** (2021) 4449–4467 [FERMILAB-PUB-21-266-SCD-T; arXiv:2106.09381 [hep-ph]].

7. GENIE Collaboration (J. Tena-Vidal *et al.*), Hadronization model tuning in GENIE v3, Phys. Rev. D **105** (2022) 012009 [FERMILAB-PUB-21-024-QIS-SCD-T; arXiv:2106.05884 [hep-ph]].

8. GENIE Collaboration (J. Tena-Vidal *et al.*), *Neutrino-nucleon cross-section model tuning in GENIE v3*, Phys. Rev. D **104** (2021) 072009 [FERMILAB-PUB-20-531-SCD-T; arXiv:2104.09179 [hep-ph]].

9. I. Ruiz Simo, I. D. Kakorin, V. A. Naumov, K. S. Kuzmin, and 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]].

10. D. V. Naumov and D. S. Shkirmanov, Reactor Antineutrino Anomaly Reanalysis in Context of Inverse-Square Law Violation, Universe **7** (2021) 246.

11. D. V. Naumov, V. A. Naumov, and D. S. Shkirmanov, Rephasing invariant for three-neutrino oscillations governed by a non-Hermitian Hamiltonian, Symmetry **12** (2020) 1285.

12. I. D. Kakorin, K. S. Kuzmin, and V. A. Naumov, A unified empirical model for CCQE interactions of neutrino and antineutrino with nuclei, Phys. Part. Nucl. Lett. **17** (2020) 265–288.

13. 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].

14. 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/P2O.html`.

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17. 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]].

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## Publications in conference proceedings

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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`.

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4. V. A. Naumov, A field-theoretical approach to the neutrino oscillation problem, Four lectures given at the *Dubna International Advance School on Theoretical Physics, X Winter School in Theoretical Physics "Physics at the Large Hadronic Collider"*, BLTP JINR, Dubna, Russia January 30 – February 6, 2012, URL: `http://theor.jinr.ru/~diastp/winter12/lectures/Naumov.pdf`.

5. V. A. Naumov, Solar neutrinos. Astrophysical aspects, in: *Proceedings of the 2010 Baikal Summer School on Physics of Elementary Particles and Astrophysics, Bolshie Koty, Irkutsk region, Russia, July 6–14, 2010*, edited by A. N. Vall and D. V. Naumov, pp. 155–191, URL: `http://www.slac.stanford.edu/econf/C1007061/pdf/005.pdf`.

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