Pavel Kislitsyn

26 y.o. researcher, Saint-Petersburg
+7 981 780 2613 • pavel.kislitsyn@gmail.com
Github Telegram

Education

Ioffe Institute **Saint-Petersburg, Russia**
Ph.D. student *2023 – present*
Specialization in Cosmology and Theoretical Astrophysics

HSE University **Saint-Petersburg, Russia**
Master of Science in Physics *2021 – 2023*
Specialization in Theoretical Physics
Thesis: *"Determination of the primordial composition of baryonic matter in the Universe"*

Academic University **Saint-Petersburg, Russia**
Bachelor of Science in Applied Mathematics and Theoretical Physics *2017 – 2021*
Specialization in Theoretical Physics
Thesis: *"Determination of the primordial helium abundance using the analyses of H II region spectra"*
Main courses:
Algebra, Mathematical analysis, Probability theory, Topology, Group theory, Electrodynamics, Quantum mechanics, Quantum field theory, Condensed matter physics, Numerical methods, General relativity, Cosmology

Academic lyceum "Physical-Technical High School" **Saint-Petersburg, Russia**
General Certificate of Secondary Education *2014 – 2017*
Specialization in physics and mathematics

Work Experience

Department of Theoretical Astrophysics, Ioffe institute **Saint Petersburg, Russia**
Junior research scientist *2023 – present*

Department of Theoretical Astrophysics, Ioffe institute **Saint Petersburg, Russia**
Laboratory assistant *2021 – 2023*

Skills

Languages: Russian (native speaker), English (Upper intermediate), Deutsch, Italian (basic)

Computer skills: Julia (PyCall, PyPlot, DelimitedFiles), Python (numpy, scipy, matplotlib, os, emcee, chainconsumer, numba), git, slurm, Excel/VBA; some coding experience in Java, SQL, C, Javascript

Researcher skills: Statistics and probability theory, Monte Carlo methods, Excel, basics in machine learning technologies

Conferences

- NCPHM "XVI international school on Neutrino physics and Astrophysics", Technopark Sarov, Russia. – **speaker**. (2024)
- ESO conference "Spectral Fidelity", Firenze, Italy – **speaker**. (2023)

Fellowships & Awards

- Award for the authors of the best papers published in the journal "Astronomy Letters" in 2021 (2025)
- "BASIS" Foundation grants for participating in the summer school. (2023, 2025)
- Ioffe fellowship for students of 2-4 courses. (2020)
- Awardee diploma of the All-Russian Olympiad of schoolchildren on astronomy. (2015)

Key publications

- Lysyy Yu.A., **Kislitsyn P.A.**, Ivanchik A.V.
  Low-Energy Neutrinos from Primordial Black Holes: A New Possibility for Observing Hawking Radiation
  Astronomy Letters, Volume 50, Issue 11, p.649-656, 2024. (Q3, Impact factor: 1.384), 2025 https://arxiv.org/abs/2201.06431
- **Kislitsyn P.A.**, Balashev S.A., Murphy M.T., Ledoux C., Noterdaeme P., Ivanchik A.V.
  A new precise determination of the primordial abundance of deuterium: measurement in the metal-poor sub-DLA system at $z = 3.42$ towards quasar J 1332+0052.
  Monthly Notices of the Royal Astronomical Society, Volume 528, Issue 3, pp.4068-4081, 2024. (Q1, Impact Factor: 4.7) https://arxiv.org/abs/2401.1279
- Kurichin O.A., **Kislitsyn P.A.**, Ivanchik A.V.
  Determination of H II Region Metallicity in the Context of Estimating the Primordial Helium Abundance.
  Astronomy Letters, Volume 47, Issue 10, p.674-685, 2021. (Q3, Impact factor: 1.384), 2021 https://arxiv.org/abs/2201.06431
- Kurichin O.A., **Kislitsyn P.A.**, Klimenko V.V., Balashev S.A., Ivanchik A.V.
  A new determination of the primordial helium abundance using the analyses of H II region spectra from SDSS.
  Monthly Notices of the Royal Astronomical Society, Volume 502, Issue 2, pp.3045-3056, 2021. (Q1, Impact Factor: 5.287), 2021 https://arxiv.org/abs/2101.09127