

# MAKSAT SATYBALDIEV

HIGH ENERGY ASTROPHYSICIST

maksat.satybaldiev@ntnu.no

## EXPERIENCE

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- January 2026*      **Research Visit** | University of Geneva, ISDC, Versoix, Switzerland
- 2023 to present*      **PhD Candidate** | Norwegian University of Science and Technology,  
Department of Physics
- 2020 to 2023*      **Research Assistant** | Space Research Institute of the Russian Academy of Sciences  
(IKI), Laboratory of Fundamental and Applied X-ray Astrophysics

## EDUCATION

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- 2023 to present*      **PhD in Astrophysics**  
**Norwegian University of Science and Technology**, Trondheim, Norway  
Supervisors: Prof. Manuel Linares and Dr. Vittoria Vecchiotti
- 2021 to 2023*      **MS Applied Mathematics and Physics**  
**Moscow Institute of Physics and Technology**, Russia  
Thesis: "*Study of X-ray flares from the wind-fed X-ray binaries*"  
Supervisor: Dr. Ilya Mereminskiy
- 2017 to 2021*      **BS Applied Mathematics and Physics**  
**Moscow Institute of Physics and Technology**, Russia  
Thesis: "*Periodic activity of the X-ray bursters*"  
Supervisor: Dr. Ilya Mereminskiy

## PUBLICATIONS

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- Satybaldiev, M.**, Linares, M., & Vecchiotti, V., "*Gamma-Ray Orbital Modulation in Spider Pulsars: Three Discoveries and a Universal Modulated Fraction*", **The Astrophysical Journal**, 998, 94 (2026)
- Satybaldiev, M. N.**, Mereminskiy, I. A., Lutovinov, A. A., Karasev, D. I., Semena, A. N., & Shtykovsky, A. E., "*Spectral and Temporal Analysis of the Supergiant Fast X-ray Transient IGR J16195-4945 with SRG/ART-XC*," **Astronomy Letters**, 49, 249 (2023)

## AWARDS & SCHOLARSHIPS

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- November 2025*      **Best young scientist of the year** (second place),  
Ministry of Science, Higher Education, and Innovation of the Kyrgyz Republic
- April 2023*      **Best presentation award winner**, 65th MIPT Conference
- Spring 2023*      **Scholarship** for excellent academic achievements, MIPT
- 2017 to 2023*      **State Academic Scholarship** for bachelor and master students at MIPT

## CONFERENCES, WORKSHOPS, SEMINARS & EXTRA COURSES

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- January 2026 **University of Geneva Seminar**, Versoix, Switzerland  
*"Gamma-Ray Orbital Modulation in Spider Pulsars"*
- September 2025 **Pulsar 2025**, Geremeas, Italy  
*"Gamma-Ray Orbital Modulation in Spider Pulsars: Results from a Systematic Search"*  
**M. Satybaldiev**, M. Linares, V. Vecchiotti (poster)
- June 2025 **European Astronomical Society Annual Meeting**, Cork, Ireland  
*"Discovery of gamma-ray orbital modulation in three spider pulsars"*  
**M. Satybaldiev**, M. Linares, V. Vecchiotti (talk)
- June 2025 **Norwegian Physical Society Meeting**, Trondheim, Norway  
*"Discovery of gamma-ray orbital modulation in three spider pulsars"*  
**M. Satybaldiev**, M. Linares, V. Vecchiotti (talk)
- May 2025 **XVIII Neutron Star Workshop**, Bonn, Germany  
*"Discovery of gamma-ray orbital modulation in three spider pulsars"*  
**M. Satybaldiev**, M. Linares, V. Vecchiotti (talk)
- June 2024 **IPTA 2024**, Milan, Italy  
 International Pulsar Timing Array student week (participant)
- November 2023 **NTNU Astro & Theory Seminar**, Trondheim, Norway  
*"Study of X-ray flares from the wind-fed X-ray binaries"* (talk)
- July 2023 **Physics of Neutron Stars**, St. Petersburg, Russia  
*"Spectral and Temporal Analysis of the Supergiant Fast X-ray Transient IGR J16195-4945 with SRG/ART-XC"*  
**M. N. Satybaldiev**, I. A. Mereminskiy, A. A. Lutovinov, D. I. Karasev, A. N. Semena, A. E. Shtykovsky (poster)
- April 2023 **XX Young Scientists Conference**, Space Research Institute (IKI)  
*"Flares from the wind-fed X-ray binaries with red and blue supergiants"*  
**M. N. Satybaldiev**, I. A. Mereminskiy (talk)
- April 2023 **65th MIPT All-Russian Scientific Conference in honor of the 115th anniversary of L.D. Landau**, Moscow Institute of Physics and Technology  
*"Flares from the wind-fed X-ray binaries with red and blue supergiants"*  
**M. N. Satybaldiev**, I. A. Mereminskiy (talk)
- December 2022 **High Energy Astrophysics Today and Tomorrow**, Space Research Institute (IKI)  
*"Spectral and temporal analysis of the SRG/ART-XC observation of the Supergiant Fast X-ray Transient IGR J16195-4945"* (poster)
- November 2022 **High Energy Astrophysics Department Seminar**, Space Research Institute (IKI)  
*"Spectral and timing analysis of the SRG/ART-XC observation of the Supergiant Fast X-ray Transient IGR J16195-4945"* (talk)
- June 2022 **Code/Astro Workshop**, Caltech  
 Software Engineering Workshop for Astronomy (participant)
- April 2022 **XIX Young Scientists Conference**, Space Research Institute (IKI)  
*"SRG/ART-XC observation and analysis of the X-ray transient IGR J16195-4945"*  
**M. N. Satybaldiev**, I. A. Mereminskiy (talk)

April 2021 **XVIII Young Scientists Conference**, Space Research Institute (IKI)  
"Periodic activity of the X-ray bursters"  
M. N. Satybaldiev, I. A. Mereminskiy (talk)

August 2020 **Data-driven Astronomy**, Coursera  
Python, SQL, Machine Learning applied to Astronomy

TECHNICAL EXPERIENCE

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*Professional Telescope Experience* **Fermi-LAT, XMM-Newton, NICER, NuSTAR, SRG/ART-XC, Swift/BAT, Swift/XRT, INTEGRAL, RXTE**  
Timing and spectral analysis.

*Computing skills* **Programming:** Python, C  
**Utilities:** astropy, git, numpy, XSPEC, DS9  
**Presentation:** L<sup>A</sup>T<sub>E</sub>X, Matplotlib, Adobe Photoshop  
**OS:** macOS, Linux, Windows

TEACHING

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Fall 2022 **Teaching Assistant**, Space Physics Department introductory course  
for sophomore students  
Moscow Institute of Physics and Technology

January 2020 **Intensive course in Olympiad-level Physics for high school students**  
School-Lyceum #61, Bishkek, Kyrgyzstan

OTHER INFORMATION

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*Biographical Information* **Citizenship:** Kyrgyz Republic (Kyrgyzstan)  
**Languages:** Kyrgyz, English, Russian, Norwegian (basic), French (basic)  
**Birth:** 30 September 1999, Bishkek, Kyrgyzstan

*Social Activities* **Scientific Olympiad Organizer**  
Organization of scientific olympiads for high school students (2017–2021)  
**Election Observer**  
2020 Kyrgyz parliamentary election

*This CV was last updated on April 3, 2026.*