

MAKSAT SATYBALDIEV

ASTROPHYSICIST

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<https://maksatsat.github.io>

EXPERIENCE

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

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 **M.S. Applied Mathematics and Physics**
Moscow Institute of Physics and Technology, Russia
GPA: 4.88/5.00
Thesis: *"Study of X-ray flares from the wind-fed X-ray binaries"*
Supervisor: Dr. Ilya Mereminskiy

2017 to 2021 **B.S. Applied Mathematics and Physics**
Moscow Institute of Physics and Technology, Russia
GPA: 4.48/5.00
Thesis: *"Periodic activity of the X-ray bursters"*
Supervisor: Dr. Ilya Mereminskiy

PUBLICATIONS

October 2025 **M. Satybaliev**, M. Linares, V. Vecchiotti, *"Gamma-ray Orbital Modulation in Spider Pulsars: Three Discoveries and a Universal Modulated Fraction"*, submitted to **The Astrophysical Journal**

June 2023 **M. N. Satybaliev**, I. A. Mereminskiy, A. A. Lutovinov, D. I. Karasev, A. N. Semena, A. E. Shtykovsky, *"Spectral and Temporal Analysis of the Supergiant Fast X-ray Transient IGR J16195-4945 with SRG/ART-XC"*, **Astronomy Letters**, 49, 5, 249-256 (2023)

AWARDS & SCHOLARSHIPS

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

September 2025

Pulsar 2025, Geremeas, Italy

"Gamma-Ray Orbital Modulation in Spider Pulsars: Results from a Systematic Search"

M. Satybaliev, 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. Satybaliev, M. Linares, V. Vecchiotti (talk)

June 2025

Norwegian Physical Society Meeting, Trondheim, Norway

"Discovery of gamma-ray orbital modulation in three spider pulsars"

M. Satybaliev, M. Linares, V. Vecchiotti (talk)

May 2025

XVIII Neutron Star Workshop, Bonn, Germany

"Discovery of gamma-ray orbital modulation in three spider pulsars"

M. Satybaliev, 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. Satybaliev, 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. Satybaliev, 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. Satybaliev, 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. Satybaliev , I. A. Mereminskiy (talk)
April 2021	XVIII Young Scientists Conference , Space Research Institute (IKI) "Periodic activity of the X-ray bursters" M. N. Satybaliev , I. A. Mereminskiy (talk)
August 2020	Data-driven Astronomy , Coursera Python, SQL, Machine Learning applied to Astronomy

TECHNICAL EXPERIENCE

<i>Professional Telescope Experience</i>	Fermi-LAT, SRG/ART-XC, Swift/BAT, Swift/XRT, NuSTAR, NICER, RXTE Timing and spectral analysis.
<i>Computing skills</i>	Programming: Python, C Utilities: astropy, git, numpy, XSPEC, DS9 Presentation: L ^A T _E X, Matplotlib, Adobe Photoshop OS: macOS, Linux, Windows

TEACHING

<i>Fall 2022</i>	Teaching Assistant , Space Physics Department introductory course for sophomore students Moscow Institute of Physics and Technology
<i>January 2020</i>	Intensive course in Olympiad-level Physics for high school students School-Lyceum #61, Bishkek, Kyrgyzstan

OTHER INFORMATION

*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 October 17, 2025.