

# MAKSAT SATYBALDIEV

ASTROPHYSICIST

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<https://maksatsat.github.io>

## EXPERIENCE

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- 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      **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

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- October 2025      **M. Satybaldiev**, 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. Satybaldiev**, 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

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- 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

- 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)

<i>December 2022</i>	<b>High Energy Astrophysics Today and Tomorrow</b> , 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)
<i>November 2022</i>	<b>High Energy Astrophysics Department Seminar</b> , 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)
<i>June 2022</i>	<b>Code/Astro Workshop</b> , Caltech Software Engineering Workshop for Astronomy (participant)
<i>April 2022</i>	<b>XIX Young Scientists Conference</b> , Space Research Institute (IKI) "SRG/ART-XC observation and analysis of the X-ray transient IGR J16195-4945" <b>M. N. Satybaldiev</b> , I. A. Mereminskiy (talk)
<i>April 2021</i>	<b>XVIII Young Scientists Conference</b> , Space Research Institute (IKI) "Periodic activity of the X-ray bursters" <b>M. N. Satybaldiev</b> , I. A. Mereminskiy (talk)
<i>August 2020</i>	<b>Data-driven Astronomy</b> , Coursera Python, SQL, Machine Learning applied to Astronomy

## TECHNICAL EXPERIENCE

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

## TEACHING

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<i>Fall 2022</i>	<b>Teaching Assistant</b> , Space Physics Department introductory course for sophomore students Moscow Institute of Physics and Technology
<i>January 2020</i>	<b>Intensive course in Olympiad-level Physics for high school students</b> 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 October 17, 2025.*