ANASTASIYA YILMAZ

PERSONAL INFORMATION

Address: Astronomical Institute of the Czech Academy of Sciences, Bocni II 1401, CZ-141 00 Praha 4 Sporilov, Prague, Czech Republic

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EDUCATION

Charles University, Prague– Czech Republic *01 October 2020 - Current*

Ph.D. Student, *Evolution of Accretion States in Black Hole X-ray Binaries*

Faculty of Mathematics and Physics– Astronomical Institute of Charles University

Astronomical Institute of the Czech Academy of Sciences

Bogazici University, Istanbul– Turkey *07 September 2012 - 17 August 2018*

Master of Science + Bachelor's of Science

Faculty of Education– Department of Mathematics and Science Education, Teaching Physics Program

RESEARCH INTERESTS

Spectral Evolution of Black Hole X-ray Binaries,

Study of X-ray Binaries (HMXBs and LMXBs),

Physics of Accretion Phenomena in X-ray Binaries,

Spectral and Timing Studies of Ultraluminous X-ray Sources

CONTRIBUTED TALKS, SEMINARS AND ORGANIZED WORKSHOPS/CONFERENCES

Contributed talk at the 24$^{\text{th}}$ Relativistic Astrophysics Group Meeting (RAGTIME), "Theory Meets Reality: Testing Accretion Disk Models with GRO J1655-40 and LMC X-3" (10-14 October 2022 Opava, Czech Republic).

Contributed talk at the 31$^{\text{st}}$ Texas Symposium on Relativistic Astrophysics, "Theory Meets Reality: Testing Accretion Disk Models with GRO J1655-40 and LMC X-3" (12-16 September 2022 Prague, Czech Republic).

Contributed talk at the Black Hole Accretion Under the X-ray Microscope, XMM-Newton Science Workshop: "Theory Meets Reality: Testing Accretion Disk Models with GRO J1655-40 and LMC X-3" (13-17 June 2022 Madrid, Spain).

Contributed talk at the Week of Doctoral Students, Faculty of Mathematics and Physics of Charles University: "Evolution of Accretion States in Black Hole X-Ray Binaries" (17 June 2021 Prague, Czech Republic).

Seminar at the Astronomical Institute of the Czech Academy of Sciences, "Timing and Spectral Properties of Ultraluminous X-ray Sources: Black Holes vs. Neutron Stars" (15 January 2021 Prague, Czech Republic).

31st Texas Symposium on Relativistic Astrophysics (LOC, 12-16 September 2022 Prague, Czech Republic).

X-ray Spectral Fitting Winter School (SOC/LOC, 7-11 February 2022, Hybrid/Prague, Czech Republic)

GRANTS AND FELLOWSHIPS

AHEAD2020 Trans-National Access Support for Data Analysis, European Union, Horizon 2020. (Host Institute: University of Geneva, 2022)

Spin, Thermal and Magnetic Field Evolution of Young Neutron Stars (The Scientific and Technological Research Council of Turkey (TUBITAK), 26 November 2018 - 28 July 2019)

AHEAD2020 Trans-National Access Support for Data Analysis, European Union, Horizon 2020. (Host Institute: University of Geneva, 2018)

COLLABORATION MEMBERSHIP

ATHENA(Advanced Telescope for High ENergy Astrophysics) X-Ray Observatory team member, Science Working Group 3.3 (SWG 3.3 : End Points of Stellar Evolution)

PUBLICATIONS

Gurbuz, S.; Adiguzel, A.; Ozcan, V.; Kirpici, S.; **Yilmaz, A.** *Experimental High Energy Physics Summer School For High Schools.* Canadian Journal of Physics, 2019, 97(11): 1229-1234.
DOI: 10.1139/cjp-2018-0823

TECHNICAL SKILLS

Data Analysis

XMM-Newton (X-ray Multi-Mirror Mission, The European Space Agency-ESA) - SAS (Science Analysis Software) + ESAS (Extended Source Analysis Software)

Chandra X-ray Telescope (NASA) – CIAO (Chandra Interactive Analysis of Observations)

NuSTAR (Nuclear Spectroscopic Telescope Array, NASA)

The Neil Gehrels Swift Observatory (NASA)

RXTE (The Rossi X-ray Timing Explorer)

SUZAKU (NASA)

Software

Experienced user of Python, Xspec/PyXspec, working knowledge of Sherpa and Spex.

Working knowledge of Bayesian X-ray Analysis Software (BXA), C++, Machine Learning.

LANGUAGE SKILLS

English: Proficient.

Turkish: Proficient.

German: Intermediate.

French: Beginner.