

Aysu Ece Saricaoglu

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Education

Graduate Degree Washington University in St. Louis, Ph.D. in Physics St. Louis, MO, USA	08 2023 – Present
<ul style="list-style-type: none">GPA: 3,61Advisor : Dr. Tansu Daylan	
Bachelors Degree Bilkent University, Physics Minor Certificate Bilkent University, Music Performance (Piano) Ankara, Turkey	09 2018 – 06 2023
<ul style="list-style-type: none">Major GPA: 3,26 Minor GPA: 3,34	
High School Degree YKP Science School Izmir, Turkey	09 2014 – 06 2018
<ul style="list-style-type: none">GPA:96,69/100Ranked 4237th (among 2.5 million, 0.2%) on university entrance exam (YKS))	

Experience

Undergraduate Researcher , Search for transiting exoplanets in X-Rays	06 2022 – 06 2023
<ul style="list-style-type: none">Using Chandra X-Ray Telescope data and CIAO software, working on developing a detection algorithm for possible exoplanet transits	
Undergraduate Researcher , Erciyes Neutrino Research Group (Fermilab Associate)	06 2022 – 10 2023
<ul style="list-style-type: none">Taking shifts and monitoring for the ANNIE neutrino detector, improving skills with tools in particle physics and getting training to be an expert for Bad-channel studies in the NOvA neutrino experiment at Fermilab.	
Internship , Sabanci University Program for Undergraduate Research (PURE)	07 2021 – 09 2021
<ul style="list-style-type: none">X-ray detector development for CubeSats and healthcare applications.	

Awards and Honors

<i>Honor Student</i> Bilkent University	2019 – 2023
<i>Scholarship</i> Comprehensive Scholarship of Bilkent University	2018 – 2023
<i>Scholarship</i> National Undergraduate Scholarship Program (2205) by TUBITAK (Scientific and Technological Research Council of Turkey)	2018 – 2023

Teaching Experience

<i>Teaching Assistant</i> Laboratory Assistant in Instruction , Washington University in St. Louis	01 2024 – 12 2024
<ul style="list-style-type: none">Physics I Laboratory (PHYS 191L), Physics II Laboratory (PHYS 192L)	

Projects

Analysis Pipeline	AstroMusers/luxetenebrae
<ul style="list-style-type: none">Stellar binary evolution and analysis pipeline based on COMPAS	
Simulation and Analysis Pipeline	AstroMusers/RubinsForge
<ul style="list-style-type: none">Pipeline to process and simulate LSST data based on LENSTRONOMY, LSST SCIENCE PIPELINES and SKYFIELD.	

Simulation and Analysis Pipeline

AstroMusers/captus

- Dynamical black hole capture by main sequence/neutron stars based on N-body integrator REBOUND.

Presentations

Poster Presentation **Impact of LEO Satellite Streaks on LSST Strong Lenses
detection and modelling**

01 2025

- iPoster Session: Strong and Weak Gravitational Lensing
- 245th American Astronomical Society Meeting