Ievgeniia (Ivy) Boiko

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EDUCATION

California State University, Long Beach - Long Beach, CA 2023 - present
    BACHELOR OF SCIENCE IN PHYSICS (expected December 2025)

Monterey Peninsula College - Monterey, CA 2021 - 2023

RESEARCH EXPERIENCE

California State University, Long Beach - Long Beach, CA 2024 - present
    UNDERGRADUATE RESEARCH ASSISTANT; projects include:

- COMPUTATIONAL ASTRONOMY; working toward determining stellar ages with use of an asteroseismology pipeline

Monterey Institute for Research in Astronomy - Marina, CA 2022 - 2023
    VOLUNTEER AND INTERN; projects included:

- OBSERVATIONAL ASTRONOMY; operated and collected data on the polarization of various stellar and planetary targets with both a 14 and 36-inch telescope
- SOFTWARE INSTALLATION, DEBUGGING, AND READING/WRITING PROGRAMS; installed and used a Fortran program on a Linux system to analyze data in order to determine the D/H ratio in the atmosphere of Neptune
- RESEARCH; made use of online databases such as ADS and SIMBAD to contribute to a research paper on high polarization standard stars, contributed data obtained from several independent observations

PUBLICATIONS

Published:

1. Daniel V. Cotton, Jeremy Bailey, Jean Perkins, Derek L. Buzasi, and **Ievgeniia Boiko**, *Deneb is a Large-amplitude Polarimetric Variable*, ApJL, Volume 967, Issue 2, 2024 (arXiv:2404.17707).

2. Daniel V. Cotton, Kimberly Bott, Jeremy Bailey, Lucyna Kedziora-Chudczer, Ain De Horta, Graeme Melville, Normandy Filcek, Jonathan P. Marshall, Derek L. Buzasi, **Ievgeniia Boiko**, Nicholas Borsato, Jean Perkins, Daniela Opitz, Shannon Melrose, Gesa Grüning, Dag Evensberget and Jinglin Zhao, *Polarization position angle standard stars: a reassessment of θ and its variability for seventeen stars based on a decade of observations*, MNRAS, Volume 535, Issue 2, 2024 (arXiv:2410.23466).

In Preparation:

1. Jeremy Bailey, Daniel V. Cotton, Kimberly Bott and **Ievgeniia Boiko**, *One hundred years of Venus polarimetry*, in preparation for Icarus.

2. Daniel V. Cotton, Kimberly Bott, **Ievgeniia Boiko**, Lucyna Kedziora-Chudczer, Jeremy Bailey, Behrooz Karamiqucham and Jonathan Horner, *Towards an improved determination of the methane D/H ratio for Neptune*, in preparation for Icarus.

COMPUTER SKILLS

Languages and Software:
    Intermediate proficiency with Fortran, HTML, Python, LaTeX

Operating Systems:
    Linux, Mac

PROFESSIONAL ORGANIZATIONS

Cal-Bridge Scholar Program   2024 - present
    PHYSICS & ASTRONOMY SCHOLAR

Society of Physics Students - Cal. State Univ., Long Beach   2023 - present
    TREASURER (August 2024 - present)

Women in Physics - Cal. State Univ., Long Beach   2023 - present
    PUBLICIST (August 2024 - present)

Astronomy Club - Cal. State Univ., Long Beach   2023 - present
    SECRETARY (August 2024 - present)

OUTREACH

Mobile Planetarium Program - Cal. State Univ., Long Beach   Fall 2024
    Traveled to local high schools to assist with astronomy talks using CSULB's mobile planetarium

HONORS & AWARDS

OLAF & MARY JANE ANFINSON SCHOLARSHIP - Cal. State Univ., Long Beach   2024 - 2025
DEAN'S LIST - Cal. State Univ., Long Beach   Spring 2024