

Education

- 11/2023 – present

PhD Astrophysics, Universidad de La Laguna, La Laguna, IC

EQF8 Stellar magnetic activity and rocky planets in cool dwarf stars with NIRPS.
- 09/2019 – 06/2023

MSci Astrophysics, University College London, London, UK

EQF7 Main modules: Physics of Stars, Physics of Exoplanets, Astronomical Spectroscopy, Quantum Physics. Mathematical Methods, Theory of Dynamical Systems, Techniques of High-Performance Computing.
- 09/2014 – 06/2019

System Programming, MHS "Acad. Kiril Popov", Plovdiv, BG

EQF4 A professional qualification obtained alongside secondary education. Main modules: Electronics, Object-Oriented Programming, Web Development, Database Management.
- 09/2014 – 05/2019

Secondary Education, MHS "Acad. Kiril Popov", Plovdiv, BG

EQF4 Main modules: Mathematics, Natural Sciences, Bulgarian, English, Russian.

Experience

- 11/2023 – present

Graduate Student Researcher, Instituto de Astrofísica de Canarias, La Laguna, IC

Analysis of stellar activity and potential exoplanetary signals in the spectra of cool dwarf stars. Associated with PhD Astrophysics, Universidad de La Laguna.
- 12/2022 – 03/2023

Research & Development Associate, Synaptic, Sofia, BG

Technical documentation and consultancy work in the field of natural sciences and information technologies. Engaged with the data visualisation and documentation of a prototype device in the area of rehabilitation and well-being, using Python and L^AT_EX.
- 06/2021 – 08/2021

Research Intern, University College London, London, UK

A Brian Duff studentship award by the UCL Astrophysics group, with topic "Exploration of exoplanet transits around gravity-darkened stars". Documented the use of TESS data products and the Python packages Lightkurve and eleanor. Worked with exoBush, a Fortran-based spectroscopic and photometric simulation tool described in Howarth & Smith (2001). Developed PEPPER, a Python wrapper that: (1) rapidly executes exoBush across a parameter space, (2) provides low-level tools for working with exoBush inputs/outputs, (3) provides affine-invariant Markov chain Monte Carlo fitting through emcee.
- 10/2018 – 03/2019

Web Development Intern, Viscomp Ltd., Plovdiv, BG
- 10/2017 – 03/2018

Two part-time internships, each over a span of six months. Collaborated on a prototype web-based grade-book for a local university. Worked primarily on back-end development using PHP and MySQL.

Programming, markup and observing

Current rotation		Prior experience		Observing	
L ^A T _E X	8 yr	C++, SQL, PHP	4 yr	ESO 3.6m	8 n
Python	6 yr	CSS, JS, Wolfram	2 yr	TNG 3.5m	6 n
		Go	1 yr	Rozhen 2m	4 n

Awards

- 07/2023

Doctoral INPhINIT Fellowship

"la Caixa" Foundation
- 06/2021

Brian Duff Award

University College London
- 09/2018

Joint Research Centre Award

European Union Contest for Young Scientists

Selected publications

Stefanov, A. K. et al. A sub-Earth-mass planet orbiting Barnard's star: No evidence of transits in TESS photometry. *A&A*, 693:L3, January 2025.

González Hernández, J. I. et al. A sub-Earth-mass planet orbiting Barnard's star. *A&A*, 690:A79, October 2024.

Stefanov, S. Y. and Stefanov, A. K. Tilted discs in six poorly studied cataclysmic variables. *MNRAS*, 520(3):3355–3367, April 2023.