

PERSONAL INFORMATION

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Languages: Serbian (native), English (fluent), Italian (intermediate)
Citizenship: Montenegrin

EDUCATION

University of Maryland, College Park (2019 –) College Park, MD

- PhD, Astronomy (expected 2023)
- CMNS Dean's Fellowship (2019 – 2020)

University of Maryland, College Park (2017 – 2019) College Park, MD

- MSc, Astronomy
- Graduate School Dean's Fellowship (2017 – 2018)
- Master Thesis: *Axion-like Particles and Where to Find Them: Searching for ALP-induced Core-collapse Supernovae with Fermi*. Grade: Excellent/Excellent (written & oral project report)
- Advisers: Dr. Regina Caputo (NASA/GSFC), Dr. Manuel Meyer (Stanford University/KIPAC), Dr. Massimo Ricotti (University of Maryland).
- Coursework: Radiative Processes, Stellar Structure and Evolution, Astronomical Instrumentation and Techniques, Galaxies, Cosmology, Planetary Science, Interstellar Medium and Gas Dynamics, High Energy Astrophysics, Practical Astrostatistics (pass/fail), Computational Astrophysics (audit).

Middlebury College (2013 – 2017) Middlebury, VT

- Bachelor of Arts (BA), *Magna Cum Laude*. Major: Physics, *High Honors*. Minor: Mathematics
- GPA: 3.74/4.00. College Scholar (four semesters), Dean's List (two semesters)
- [Davis UWC Scholar](#)

Li Po Chun United World College (2011 – 2013) Hong Kong

- Full merit-based scholarship; Bi-lingual International Baccalaureate Diploma

SMŠ „Ivan Goran Kovačić” (2009 – 2011) Herceg-Novi, Montenegro

- Distinguished Academic Award for representing school and country on National and International Mathematics Competitions with excellence (2011)

RESEARCH EXPERIENCE

- Department of Astronomy, University of Maryland College Park, MD
& NASA Goddard Space Flight Center Greenbelt, MD
Research Assistant to Dr. Regina Caputo (May 2018 –)
Research interests: high-energy astroparticle physics, γ -ray astronomy, indirect dark-matter searches, transients.
Member of the Fermi GRB Group and DMNP Group. Fermi-LAT Burst Advocate.
- Department of Physics, Middlebury College Middlebury, VT
Senior Thesis (September 2016 – May 2017)
Adviser: Dr. Eilat Glikman. Grade: A, High Honors
Thesis topic: *Probing into the quasar/galaxy co-evolution using the OSIRIS data.*

- Department of Physics, Middlebury College
Research Assistant to Dr. Noah Graham (June 2016 – August 2016)
Computing edge-correction coefficients to the proximity force approximation for the Casimir energy of an oblate spheroid facing a plane. Middlebury, VT
- Department of Physics, Middlebury College
Research Assistant to Dr. Eilat Glikman (June 2015 – August 2015)
Analyzing new selection criteria for red and obscured quasars in SDSS Stripe 82. Middlebury, VT

WORK EXPERIENCE

- Department of Astronomy, University of Maryland
Teaching Assistant for Introductory Astronomy (September 2017 – May 2018)
Organizing and facilitating discussion sections; grading homework assignments and exams. Topics covered include introductory level discussion of astronomical observations and history of astronomy, the Solar system, stellar evolution, galaxy morphology and evolution, cosmology. College Park, MD
- Department of Physics, Middlebury College
Astronomy Outreach Event Assistant (September 2015 – May 2017)
Conducting observatory events and operating the telescopes at the Mittelman Observatory. Middlebury, VT
- Center for Teaching, Learning, and Research, Middlebury College
Tutor for Newtonian Physics and Electricity and Magnetism (February 2014 – May 2017)
Running one-on-one tutoring sessions for interested undergraduate students. Middlebury, VT
- Department of Physics, Middlebury College
Teaching Assistant for Applied Mathematics to Physical Sciences (February 2016 – May 2016)
Grading homework assignments and running group help sessions. Topics covered include complex numbers and functions, sequences and series, ODE's, Fourier analysis, multi-variable calculus, special functions, and vector calculus. Middlebury, VT
- Middlebury College Library
ILL General Assistant (February 2015 – February 2017)
Processing interlibrary loan materials for delivery to Middlebury patrons. Middlebury, VT
- Department of Physics, Middlebury College
Laboratory Teaching Assistant for Newtonian Physics (September 2015 – December 2015)
Demonstrating techniques and instruments used in the experiment and assisting students during laboratory periods. Middlebury, VT
- Department of Physics, Middlebury College
Teaching Assistant for Electricity and Magnetism (September 2014 – May 2014)
Grading homework assignments and running group help sessions at an introductory level. Middlebury, VT
- LOGOS English Summer Camp
English Tutor (June 2014 – August 2014)
Teaching English language to primary school students, planning and organizing lessons and daily activities. Forlì, Italy
- Department of Physics, Middlebury College
Teaching Assistant for Newtonian Physics (January 2014 – May 2014)
Grading homework assignments and running help sessions at an introductory level. Middlebury, VT

COMPUTING SKILLS

Operating Systems

- Mac OS, Unix/Linux, Windows

Languages and Software

- Highly proficient in MATLAB, Python, XSPEC, *GtBurst*, Wolfram Mathematica, L^AT_EX. Proficient in PyRAF, IDL, Adobe Illustrator, TOPCAT, DS9. Beginner in HTML/CSS and C.

ADDITIONAL
INFORMATION**Publications**

- Axion-like Particles from Core-collapse Supernovae: Investigating *Fermi*'s Sensitivity, M. Crnogorčević, R. Caputo, and M. Meyer, in prep.
- [A Decade of Gamma-Ray Bursts Observed by Fermi-LAT: The Second GRB Catalog](#), M. Ajello and 123 co-authors, incl. M. Crnogorčević. 2019, ApJ.
- [Luminous WISE-selected Obscured, Unobscured, and Red Quasars in Stripe 82](#), E. Glikman and 13 co-authors incl. M. Crnogorčević. 2018, ApJ.

Presentations

- “*Axion-like Particles from Core-collapse Supernovae: Investigating Fermi's Sensitivity*,” poster presentation at *UCLA Dark Matter 2020, Los Angeles, CA (March, 2020)*
- “ALP-induced Core-collapse Supernovae,” oral presentation at *Fermi* Collaboration Meeting, Santa Cruz, CA (September, 2019)
- “Axion-like Particles and Where to Find Them,” oral presentation at *Fermi* Summer School, Lewes, DE (June, 2018)
- “Quasar/Galaxy Co-evolution with OSIRIS,” oral presentation at Undergraduate Spring Research Symposium, Middlebury College (April, 2017)
- “Edge Expansion of Scalar Casimir Energies,” oral presentation at APS Conference for Undergraduate Women in Physics, Harvard University (January, 2017)
- “Edge Expansion of Scalar Casimir Energies,” poster presentation at Undergraduate Summer Research Symposium, Middlebury College (August, 2016)
- “New Selection Criteria for Red and Obscured Quasars in Stripe 82,” poster presentation at APS Conference for Undergraduate Women in Physics, Syracuse University (January, 2016)
- “New Selection Criteria for Red and Obscured Quasars in Stripe 82,” presentation at Keck Northeast Astronomy Consortium Undergraduate Symposium on Research in Astronomy, Williams College (October, 2015)
- “New Selection Criteria for Red and Obscured Quasars in Stripe 82,” Keck Northeast Astronomy Consortium Undergraduate Research in Astronomy Journal (October, 2015)
- “Snake-in-the-grid” mathematics research paper submitted as Extended Essay for the International Baccalaureate Diploma, Li Po Chun United World College (April, 2013)
- “Hilbert’s Theorem 90”, presentation at the IX Conference of Scientific Research Center Petnica, Belgrade (September, 2010)
- “Hilbert’s Theorem 90,” publication in “Petničke sveske,” Belgrade (September, 2010)

Participations in Camps and Awards

- *Fermi* Summer School, Lewes, DE (June, 2018)
- Four-time participant of the Mathematics Program at Petnica Scientific Center (2010)
- Member of the Montenegrin National Team and a two-time participant of the Junior Balkan Mathematical Olympiad (JMBO); bronze medal winner (JMBO 2009)

Outreach

- [GRAD-MAP](#) team co-lead, University of Maryland (September 2019 –). Member (September 2017 –).
- [BANG!](#) Seminar Organizing Committee coordinator, University of Maryland (June 2019 –)
- [EDI](#) Committee member, University of Maryland. (September 2017 –)
- [AGN](#) (currently known as ACE) mentor to undergraduate students, University of Maryland. (September 2018 – September 2019)
- Women in Physics, luncheon co-founder, Middlebury College (September 2016 – May 2017)

Hobbies

US Masters Swimming member, IM Volleyball player (member of the departmental team *Dirty Snowballs*), spoken-word poetry, creative writing, chess, fencing, getting lost in DC.