

Dr. Constantina M. Fotopoulou Rathjen

Computational Astrophysicist & Researcher in Wireless Communication

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Work Experience

Oct. 2023 -
present

Radio Communication Expert

brown-ippss GmbH, Bonn, Germany

Jan. 2023 -
Apr. 2023

Postdoctoral Researcher in Computational Astrophysics

Max Planck Institute for Astrophysics, Garching, Germany

Education

Sep. 2018 -
Dec. 2022

Ph.D. in Astronomy

Max Planck Institute for Astrophysics & Ludwig Maximilian University of Munich, Germany

- Supervisors: Dr. Thorsten Naab, Prof. Volker Springel
 - Thesis: [The multi-phase interstellar medium in a high resolution simulation of a dwarf starburst](#)
- IMPRS Fellow: Successful completion of the graduate training program at the exclusive International Max Planck Research School (IMPRS) on Astrophysics for high-potential Ph.D. candidates.

Oct. 2016 -
July 2018

M.Sc. in Astrophysics, Astronomy and Mechanics, summa cum laude

National and Kapodistrian University of Athens, Greece

- Supervisors: Dr. Kalliopi Dasyra, Prof. Despina Hatzidimitriou
- Thesis: Study of the Kinematics and the Excitation of Molecular Gas in Radio-galaxy 4C12.50 using ALMA

Experience: Teaching assistant for Astrophysics Laboratory (4th year Undergraduate).

Sep. 2011 -
Mar. 2016

B.Sc. in Physics, summa cum laude

Specialization in Astrophysics, Astronomy and Mechanics

National and Kapodistrian University of Athens, Greece

- Supervisor: Prof. Despina Hatzidimitriou
 - Thesis: Optical spectroscopic identification of AGN counterparts of X-ray sources in the M31 field
- Honors: Academic Scholarship for Excellence Among Undergraduate Students, State Scholarships Foundation of Greece

Publications

Fotopoulou, C. M., Naab, T., Lahén, N., et al. (submitted, July 2024). The masses, structure and lifetimes of cold clouds in a high-resolution simulation of a low metallicity starburst.

Bisbas, T. G., Walch, S., Naab, T., Lahén, N., Herrera-Camus, R., Steinwandel, U. P., **Fotopoulou, C. M.** et al. 2022, ApJ, 934, 115B. [The origin of the \[CII\]-deficit in a simulated dwarf galaxies starburst.](#)

Fotopoulou, C. M., Dasyra, K. M., Combes, F., et al. 2019, A&A, 629, A30. [Complex molecular gas kinematics in the inner 5 kpc of 4C12.50 as seen by ALMA.](#)

Languages

🇬🇷 **Greek:** Native 🇬🇧 **English:** Full Proficiency (C2 certificate) 🇫🇷 **French:** Full Proficiency (C2 certificate) 🇩🇪 **German:** Intermediate

Participation in Conferences

June 2022	From Stars to Galaxies II (<i>poster</i>) - Gothenburg, Sweden
July 2021	Ringberg Meeting 2021 (<i>talk</i>) - Ringberg Castle, Germany
July 2021	15th Hellenic Astronomical Conference (<i>talk</i>) - Patras (virtually), Greece
July 2017	13th Hellenic Astronomical Conference (<i>poster</i>) - Heraklion, Greece
July 2016	European Week of Astronomy and Space Science 2016 (<i>poster</i>) - Athens, Greece

Invited Talks

May 2023	University of Bristol - Bristol (virtually), UK
Feb. 2023	Newcastle University - Newcastle (virtually), UK
Feb. 2022	Center for Computational Astrophysics - Simons Foundation - New York, USA
Nov. 2021	Max Planck Institute for Astrophysics - Garching, Germany
Oct. 2021	Hellenic Astronomical Society - Athens (virtually), Greece
Dec. 2019	National and Kapodistrian University of Athens - Athens, Greece
Dec. 2019	University of Cologne - Cologne, Germany

Workshops & Courses

Feb. 2024	Deep Learning School , <i>RWTH Aachen University & ERUM Data Hub</i> - Wiehl, Germany
Nov. 2023	Wireless Communications , <i>Yonsei University (Coursera)</i>
Sep. 2023	SQL for Data Science , <i>University of California, Davis (Coursera)</i>
Apr. 2022	Python for Data Science and Machine Learning Bootcamp , <i>Udemy</i>
July 2019	ATA - Advancing Theoretical Astrophysics Summer School , <i>University of Amsterdam</i> - Amsterdam, Netherlands
May 2019	Python Programming Course , <i>IMPRS</i> - Garching, Germany
Mar. 2019	Bash Programming Course , <i>IMPRS</i> - Garching, Germany
Mar. 2019	Git Programming Course , <i>IMPRS</i> - Garching, Germany
Sep. 2017	IPP - Summer University for Plasma Physics and Fusion Research , <i>Max Planck Institute for Plasma Physics (IPP)</i> - Garching, Germany
July 2016	The 2nd Summer School of the Hellenic Astronomical Society: “Nuclear activity in galaxies” , <i>Hellenic Astronomical Society</i> - Athens, Greece
Apr. 2016	Introduction to Virtual Observatory Tools , <i>National and Kapodistrian University of Athens</i> - Athens, Greece

Public Outreach & Volunteering

Sep. 2019 - present	Administrator of the Facebook group “Jobs for Astronomers” (6.2K members) an initiative to help Astrophysicists interested in academic and non-academic job postings
May 2019 - Dec. 2021	Principal Coordinator of “Career Seminars” and member of the Planetarium team at the Max Planck Institute for Astrophysics, Garching
Dec. 2016 - June 2017	Deputy Coordinator for Greece of the Scientific Essay Contest for students “Cassini Scientist for a Day 2016 – 2017”, organized by ESA, NASA & the National and Kapodistrian University of Athens (NKUA).
Oct. 2015 - Aug. 2018	Founding member of the Education and Public Outreach Team “SpaceGates” and volunteer during the observation nights for the public, organized by the NKUA.