



# Savvas Chanlaridis

## Curriculum Vitae

Updated: December 2022

### Research Interests

Stellar structure and evolution, formation and evolution of compact objects, double neutron star binary systems, equation-of-state of neutron stars, pulsar astronomy, nuclear astrophysics (with a particular focus on nucleosynthesis in extreme astrophysical environments such as compact object mergers and core collapse supernovae).

### Education

- present **Ph.D. in Astrophysics**, *University of Crete*, Greece.
- 2019 **M.Sc. in Astrophysics**, *University of Bonn*, Germany.
- 2016 **B.Sc.(Hons) in Physics**, *Aristotle University of Thessaloniki*, Greece.  
Minored in Nuclear & Elementary Particle Physics

### Certifications

- Jul. 2022 **University of Aegean (MOOC)**, *Advanced Python with applications in Machine Learning*, Credential ID: 2022\_18466.
- Apr. 2022 **Mathesis@Crete University Press (MOOC)**, *Data Science and Applied Machine Learning with Python*.

### Funding

#### Employment

- Mar. 2021 - present **Scientific Personnel**, *Institute of Astrophysics - FORTH*, Greece.  
Worked in the Stellar AfterLife and Transients group as a doctoral candidate.

#### Scholarship

- 2012 **Erasmus exchange student**, *Istituto Nazionale di Fisica Nucleare (INFN)*, Italy.  
I secured an EU-funded scholarship to participate in an intensive exchange program on applications of nuclear technologies.

#### Travel Grants

- Nov. 2019 **Participant**, *Aristotle University of Thessaloniki*, Greece.  
Travel grant to attend the workshop “Neutron Stars in the Gravitational Wave Era” at Universität Tübingen, Germany.
- Apr. 2019 **Participant**, *Bonn-Cologne Graduate School*.  
Travel grant to participate in the PHAROS summer school on “multi-messenger Astrophysics” at Universität Jena, Germany.

Apr. 2019 **Participant**, *South-West University "Neofit-Rilski"*.

Travel grant to participate in the 5th spring school on "advances in Nuclear Physics" at South-West University "Neofit-Rilski", Bulgaria.

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## Research Experience

Mar. 2021 – **Doctoral candidate**, *Institute of Astrophysics - FORTH | Stellar AfterLife & Transients Group*, Greece.

Project: Understanding the mass spectrum of neutron stars

Nov. 2019 – **Guest Researcher**, *Aristotle University of Thessaloniki | Gravitational Waves Group*, Greece.

Project: Probing the effects of stellar wind of non-accreting SNe-Ia progenitors.

Oct. 2018 – **Graduate Research Assistant**, *Argelander-Institut für Astronomie | Group of Stellar Astrophysics*, Germany.

Master Thesis research under the supervision of Dr. J. Antoniadis, and Prof. Dr. N. Langer.

Apr. 2018 – **Graduate Intern**, *Argelander-Institut für Astronomie | Group of Stellar Astrophysics*, Germany.

Project: Evolution of ultra-stripped helium stars towards core collapse.

April 2012 – **Undergraduate Research Assistant**, *Aristotle University of Thessaloniki | Division of Nuclear & Elementary Particle Physics*, Greece.

Diploma Thesis research under the supervision of Dr. N. Servitzoglou, and Prof. Dr. S. Stoulos.

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## Teaching Experience

Sep. 2022 – **Instructor**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.

Dec. 2022 **ECL-MISC104**: Analysis of Scientific Data with Python; I organized and taught an intensive program on scientific data analysis targeting undergraduate students.

Sep. 2021 – **Teaching Assistant**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.

Dec. 2022 **Φ230**: Astrophysics I; Undergraduate introductory course to Astrophysics.

Feb. 2022 – **Teaching Assistant**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.

Sep. 2022 **Φ202**: Introduction to Modern Physics II; Undergraduate introductory course to Special Theory of Relativity, Nuclear Physics, and Elementary Particle Physics.

Jul. 2018 – **Teaching Assistant**, *Universität Bonn | Argelander-Institut für Astronomie*, Germany.

Oct. 2019 **physics601**: Radio-astronomical Observations; Graduate advanced lab course.

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## Publications

### First or Second Author

Dec. 2022 **S. Chanlaridis, J. Antoniadis, D.R. Aguilera-Dena et al.**, *Thermonuclear and Electron-Capture Supernovae from Stripped-Envelope Stars*.

A&A 668, A106, DOI: doi.org/10.1051/0004-6361/202243035, arXiv: 2201.00871

Jan. 2020 **J. Antoniadis, S. Chanlaridis, G. Gräfener, and N. Langer**, *Type Ia supernovae from non-accreting progenitors*.

A&A 635, A72, DOI: doi.org/10.1051/0004-6361/201936991, arXiv: 1912.07608

### Conference Abstracts

Sep. 2014 **S.G. Chanlaridis, M. Chatzimarkou, A. Makridou et al.**, *Establishment of local DRLs at Theageneio Cancer Hospital of Thessaloniki*.

Physica Medica, 09/2014, 30(S1):126, DOI: dx.doi.org/10.1016/j.ejmp.2014.07.335

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## Contributed Presentations

- Nov. 2021 **SuperVirtual – From Common to Exotic Transients**, *Poster*.  
Jul. 2021 **15th Conference of Hellenic Astronomical Society**, *Talk*.  
Jun. 2021 **European Astronomical Society**, *Poster*.  
Annual Meeting  
Nov. 2019 **Aristotle University of Thessaloniki**, *Seminar Talk*.  
Section of Astronomy, Astrophysics, & Celestial Mechanics  
Aug. 2019 **Max-Planck Institut für Radioastronomie**, *Poster*.  
Fachbeirat  
Sep. 2014 **European Conference on Medical Physics**, *Poster*.

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## Tools & Technologies

### Programming Languages

- Python
- C++
- Java
- Fortran

### Software

- MESA 1D stellar evolution code
- SLURM & CONDOR cluster management systems
- Docker & Singularity
- LaTeX

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## Training

- July 2022 **Summer School**, *University of Crete, Greece*.  
Topic(s): AstroStatistics.  
September 2021 **Summer School**, *Universität Heidelberg, Germany (Virtual)*.  
Topic(s): Stellar Ecosystems.  
June 2021 **Workshop**, *International Pulsar Timing Array (IPTA), Netherlands (Virtual)*.  
Topic(s): Neutron Stars in the Gravitational Wave Era.  
November 2019 **Workshop**, *Universität Tübingen, Germany*.  
Topic(s): Neutron Stars in the Gravitational Wave Era.  
April 2019 **Summer School**, *Universität Jena, Germany*.  
Topic(s): Multi-messenger Astrophysics.  
August 2016 **Summer School**, *Bonn-Cologne Graduate School (BCGS), Germany*.  
Topic(s): X-ray Astronomy, Challenging the Standard Model, Quantum Information  
March 2014 **Erasmus**, *Istituto Nazionale di Fisica Nucleare (INFN), Italy*.  
Topic(s): Medical Applications of Nuclear Technology & RAdiations (MANTRA), an activity of the Cooperation for Higher Education on Radiological & Nuclear Engineering (CHERNE) network.  
April 2013 **Training Seminar**, *University of Thessaly, Greece*.  
Topic(s): Ionizing and non-ionizing radiations & radioprotection.  
May 2012 **Spring School**, *South-West University “Neofit-Rilski”, Bulgaria*.  
Topic(s): Advances in Nuclear Physics.

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## Professional Associations

2021 – **Junior Member**, *European Astronomical Society*.  
present

2021 – **Junior Member**, *Hellenic Astronomical Society*.  
present

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## Outreach & Volunteering

2022 – **Crete, Greece**, “*Open Nights at Skinakas Observatory*”, Volunteer.  
present

2005 – 2016 **Chalkidiki, Greece**, “*AstroNight for the public*”, Organizer.

2015 **Thessaloniki, Greece**, *1st Thessaloniki Science Festival*, Ambassador.

2011 **Thessaloniki, Greece**, *Centre for Science & Technology Museum “NOESIS”*, Volunteer.

2008 – 2010 **Thessaloniki, Greece**, *Club of Friends of Astronomy*, Volunteer.

2008 – 2009 **Thessaloniki, Greece**, “*Physics Partizani*” Group, Volunteer.