# 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

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| 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

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| 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

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

### Scholarship

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| Apr. 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

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| 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. |

May. 2012    **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.

## Research Experience

Mar. 2021 – present    **Doctoral candidate**, *Institute of Astrophysics - FORTH | Stellar AfterLife & Transients Group*, Greece.
Project: Understanding the mass spectrum of neutron stars

Nov. 2019 – Nov. 2022    **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 – Oct. 2019    **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. – Oct. 2018    **Graduate Intern**, *Argelander-Institut für Astronomie | Group of Stellar Astrophysics*, Germany.
Project: Evolution of ultra-stripped helium stars towards core collapse.

Apr. 2012 – Apr. 2013    **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.

## Teaching Experience

Sep. – Dec. 2022    **Instructor**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.
**ECL-MISC104**: Analysis of Scientific Data with Python; I organized and taught an intensive program on scientific data analysis targeting undergraduate students.

Feb. – Sep. 2022    **Teaching Assistant**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.
**Φ202**: Introduction to Modern Physics II; Undergraduate introductory course to Special Theory of Relativity, Nuclear Physics, and Elementary Particle Physics.

Sep. 2021 – Dec. 2022    **Teaching Assistant**, *University of Crete | Institute of Astrophysics - FORTH*, Greece.
**Φ230**: Astrophysics I; Undergraduate introductory course to Astrophysics.

Jul. 2018 – Oct. 2019    **Teaching Assistant**, *Universität Bonn | Argelander-Institut für Astronomie*, Germany.
**physics601**: Radio-astronomical Observations; Graduate advanced lab course.

## 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

## Contributed Presentations

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

## Tools & Techonologies

### Programming Languages

- Python
- Java

- C++
- Fortran

### Software

- MESA 1D stellar evolution code
- Docker & Singularity

- SLURM & CONDOR cluster management systems
- LaTeX

## Training

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| July 2022 | **Summer School**, *University of Crete*, Greece. <br> Topic(s): AstroStatistics. |
| September 2021 | **Summer School**, *Universität Heidelberg*, Germany (Virtual). <br> Topic(s): Stellar Ecosystems. |
| June 2021 | **Workshop**, *International Pulsar Timing Array (IPTA)*, Netherlands (Virtual). <br> Topic(s): Neutron Stars in the Gravitational Wave Era. |
| November 2019 | **Workshop**, *Universität Tübingen*, Germany. <br> Topic(s): Neutron Stars in the Gravitational Wave Era. |
| April 2019 | **Summer School**, *Universität Jena*, Germany. <br> Topic(s): Multi-messenger Astrophysics. |
| August 2016 | **Summer School**, *Bonn-Cologne Graduate School (BCGS)*, Germany. <br> Topic(s): X-ray Astronomy, Challenging the Standard Model, Quantum Information |
| March 2014 | **Erasmus**, *Istituto Nazionale di Fisica Nucleare (INFN)*, Italy. <br> 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. <br> Topic(s): Ionizing and non-ionizing radiations & radioprotection. |
| May 2012 | **Spring School**, *South-West University "Neofit-Rilski"*, Bulgaria. <br> Topic(s): Advances in Nuclear Physics. |

## Professional Associations

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

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

## Outreach & Volunteering

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

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.