

# Gabriele Bozzola

## Contact information

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- Address • N317, Steward Observatory, 933 N Cherry Ave, 85721, Tucson, AZ  
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## Education

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- 2018 – ... • PhD in Astronomy and Astrophysics at University of Arizona GPA: 4/4  
Advisor: Prof. [Vasileios Paschalidis](#)
- 2015 – 2017 • Master of Physics at University of Milano (*cum laude*) GPA: 30/30  
Thesis: Differential rotation and quasi-radial instability of binary neutron star merger remnants. Advisor: Prof. Nikolaos Stergioulas
- 2012 – 2015 • Bachelor of Physics at University of Milano (*cum laude*) GPA: 29.35/30

## Relevant Working Experience

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- 2016 • Junior System Administrator at Computation and Multimedia Lab ([LCM](#)) of the Physics Department at the University of Milan (6 months)

## Peer-reviewed Publications

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★ notable

- 2021 • **G. Bozzola**, V. Paschalidis. “Numerical-relativity simulations of the quasi-circular inspiral and merger of non-spinning, charged black holes: methods and comparison with approximate approaches”. PRD **104**, 4, 044004
- 2021 • **G. Bozzola** “kuibit: Analyzing Einstein Toolkit simulations with Python”. JOSS **60**(6), 3099
- 2021 ★ **G. Bozzola**, V. Paschalidis. “General relativistic simulations of the quasi-circular inspiral and merger of charged black holes: GW150914 and fundamental physics implications”. Phys. Rev. Lett. **126**, 041103
- 2019 • **G. Bozzola**, P. Espino, C. Lewin, V. Paschalidis. “Maximum mass, solution space and universal relations of rotating relativistic hadron-quark hybrid stars”. Eur. Phys. J. A **55** 9, 149
- 2019 • **G. Bozzola**, V. Paschalidis. “Initial data for general relativistic simulations of multiple electrically charged black holes with linear and angular momenta”. PRD **99**, 10, 104044
- 2017 • **G. Bozzola**, N. Stergioulas, A. Bauswein. “Universal relations for differentially rotating relativistic stars at the threshold to collapse”. MNRAS **474**, 3557–3564

## Awards

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- 2021 – 2023 • NASA Future Investigator in NASA Earth and Space Science
- 2020 – 2021 • TACC Frontera Fellowship

## Supercomputing Time

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(allocations obtained as PI or co-I via a competitive selection process)

- 2021 • 146,250 SBUs on NASA's HECC
- 2020 • 50,000 SUs on TACC's Frontera

## Refereeing Experience

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- 2020 – ... • Physical Review D

## Memberships

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- 2018 – ... • LISA (Laser Interferometer Space Antenna) Science Group

## Teaching, Outreach, and Service

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- 2020 – ... • Building, maintaining, and providing support for software for the scientific community (mainly, [kuibit](#)) and for the open-source community (mainly, [emacs-libvterm](#))
- 2020 – ... • Leading member of [Steward Observatory International Scholars Task Force](#) (promoting inclusion and equity for international students and post-docs)
- 2019 • Weekly outreach activities with K-12 classes at the Planetarium of The University of Arizona
- 2018 – ... • Co-mentoring Astronomy undergraduate students at The University of Arizona with Vasileios Paschalidis
- 2017 – ... • Prepared and presented a series of seminars on computational tools for physicists at the Aristotle University of Thessaloniki

## Current and Previous Supervisors

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- Vasileios Paschalidis, Assistant Professor at the Astronomy and Physics Departments, The University of Arizona (US), [vpaschal@arizona.edu](mailto:vpaschal@arizona.edu) (PhD supervisor)
- Nikolaos Stergioulas, Professor at Aristotle University of Thessaloniki (GR), [niksterg@auth.gr](mailto:niksterg@auth.gr) (master thesis advisor)
- Pierre Pizzochero, Associate Professor at University of Milano (IT) and INFN researcher, [pierre.pizzochero@mi.infn.it](mailto:pierre.pizzochero@mi.infn.it) (master thesis advisor)

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