

EMANUELE BERTI – BIOGRAPHICAL SKETCH

Professor, Department of Physics & Astronomy
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Education:

- January, 2002 University of Rome *La Sapienza*
Ph. D. in Physics.
- October, 1998 University of Rome *La Sapienza*
Laurea in Theoretical Physics, full marks *cum laude* (110/110 e lode).

Academic Positions:

- 2018-present Professor, Johns Hopkins University
- 2014-2018 Associate Professor, University of Mississippi
- 2010-2016 Visiting Associate Professor, Caltech, Pasadena, CA
- 2007-2009 NASA ORAU Senior Post-doctoral Fellow, JPL, Pasadena, CA
Mentor: Curt Cutler
- 2003-2007 Post-doctoral position, Institut d'Astrophysique de Paris (2003-2004) and
Washington University in Saint Louis (2004-2007)
Mentor: Clifford M. Will
- 2001-2003 Post-doctoral position, Aristotle University of Thessaloniki (Greece)
Mentor: Kostas Kokkotas

Selected Honors and Awards:

- 2017 University of Mississippi College of Liberal Arts
Award for Research, Scholarship, and Creative Achievement.
- 2016 IOP Outstanding Reviewer Award.
- 2015 Elected Fellow of the American Physical Society.
- 2015-2017 FCT Consolidator Award, IST Lisbon (Portugal).
- 2011 American Physical Society Outstanding Referee Award.
- 2007-2009 NASA ORAU Senior Post-doctoral Fellowship.

Main Grants:

- 2018-2021 NASA ATP 17-ATP17-0225, PI (Co-PI: Nicolás Yunes).
- 2017-2020 NSF AST-1841358, PI (Co-PI: Bangalore Sathyaprakash).
- 2016-2019 NSF PHY-1841464, PI.
- 2015-2020 EU Horizon 2020 RISE Action H2020-MSCA-RISE-2015, PI.
- 2013 Oak Ridge Associated Universities (ORAU) Event Sponsorship Program, PI.
- 2012-2015 EU International Research Staff Exchange Scheme IRSES, PI.
- 2011-2016 NSF Faculty Early Career Development (CAREER) PHY-1055103, PI.
- 2009-Present NSF PHY-090003, Co-PI (PI: Ulrich Sperhake).
- 2009-2012 NSF PHY-0900735, PI.

Professional Service:

- 2019 Running for President Elect of the International Society on General Relativity and Gravitation.
- 2016-2019 Elected to the Chair Line of the American Physical Society's Division of Gravitational Physics.
- 2017-2020 Divisional Associate Editor in Gravitational Physics of *Physical Review Letters*.
- 2017-present Member of NASA's U.S. LISA Study Team.
- 2016-2017 Member of NASA's L3 Study Team.
- 2014-2019 Associate Editor of *General Relativity and Gravitation*.
- 2013 Elected Member of the Nominating Committee of the International Society on General Relativity and Gravitation.
- 2013 Contributor to the L2/L3 ESA white paper *The Gravitational Universe*.
- 2012 Member of the Science Taskforce for NASA's PCOS Gravitational-Wave Mission Concept Study Final Report.
- 2011-2014 Convenor of the Black Holes Working Group of NASA's GWSAG.
- 2002-Present Referee for Science, PRL/PRX/PRD, ApJ/ApJL, CQG, MNRAS, etc.

Selected Outreach Activities:

- 2016 Invited by the PRL Editors to author the Physics "Viewpoint" article to popularize the discovery of GW150914.
- 2011-2016 NSF-funded outreach program targeting HBCUs in Mississippi.
- 2009-Present Co-organized several STEM outreach events in Mississippi.

Selected Publications:

- "Estimating spinning binary parameters and testing alternative theories of gravity with LISA",
E. Berti, A. Buonanno & C.M. Will, *Phys. Rev. D* **71**, 084025 (2005).
- "On gravitational-wave spectroscopy of massive black holes with the space interferometer LISA",
E. Berti, V. Cardoso & C.M. Will, *Phys. Rev. D* **73**, 064030 (2006).
- "Quasinormal modes of black holes and black branes",
E. Berti, V. Cardoso, A. Starinets, *Class. Quant. Grav.* **26**, 163001 (2009).
- "Double Compact Objects III: Gravitational Wave Detection Rates",
M. Dominik, E. Berti, R. O'Shaughnessy, I. Mandel, K. Belczynski, C. Fryer, D. Holz, T. Bulik, F. Pannarale, *Astrophys. J.* **806**, 263 (2015).
- "Testing General Relativity with Present and Future Astrophysical Observations",
E. Berti et al., *Class. Quant. Grav.* **32**, 243001 (2015).

Advisors: V. Ferrari (PhD), K.D. Kokkotas, C.M. Will and C. Cutler (Postdoc).

Advisees:

Undergraduate: G. Lavagetto, G. Corsetti, M. Lemos, B. Kipapa, D. Gerosa, J. Alsing, Z. Zhang

Graduate: A. Maniopoulou, F. White, M. Dominik, H.O. Silva, S. Ghosh, S. Tanay, V. Baibhav, K.W.K. Wong

Postdoc: S. Chakrabarti, P. Pani, J. Read, M. Horbatsch, A. Klein, A. Nishizawa, G. Pappas, R. McManus, F.-L. Julié