CURRICULUM VITAE

IMRE BARTOS

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POSITIONS HELD

2017– Assistant Professor, University of Florida
2016–2017 Associate Research Scientist, Columbia University
2015 Postdoctoral Research Scientist, Columbia University
2012–2016 Lecturer in Discipline, Columbia University

ACADEMIC QUALIFICATIONS

2012 Ph.D. astrophysics, Columbia University
Dissertation: "Gravitation and Multimessenger Astrophysics" (Advisor: Szabolcs Marka)
2006 M.S. physics, Eotvos University, Hungary

MEMBERSHIPS & ACTIVITIES

LIGO Scientific Collaboration, Member, 2008–
IceCube Collaboration, Associate Member, 2014–
LISA Consortium, Member, 2018–
IUPAP, Commission on Astroparticle Physics, Associate Member, 2019–
Faculty Senate, Member, University of Florida, 2018–
Chair, Intermediate Mass Black Hole Working Group, LIGO/Virgo Collaborations 2019–
Chair, Gravitational-wave and high-energy neutrino Working Group, LIGO/Virgo Collaborations 2012–
President, New York Hungarian Scientific Society, 2017–2018
Vice President, New York Hungarian Scientific Society, 2015–2016
Board of Trustees, Hope Funds for Cancer Research, 2016–2018
Hungarian Science Abroad Presidential Committee, Member, 2017–2019
Science Research Mentor, American Museum of Natural History, 2016–2017
Executive Committee, Frontiers of Science, Columbia University, 2013–2016
Consultant to the Columbia Core Science Committee, 2014–2015

HONORS & AWARDS

One of 5 favorite features of the year, Physics World, 2018
Special Breakthrough Prize in Fundamental Physics (as member of the LIGO team), 2016
BSA Distinguished Lecture, Brookhaven National Lab, June 2016
AAS Nova Highlight, 2016
National Science Foundation Highlight, 2014
Columbia Science Fellow, Columbia University, 2012–2016
Columbia Presidential Teaching Award, Finalist, 2012
Rising Stars of Science: The Forbes 30 Under 30 (Forbes Magazine), 2012
Allan M. Sachs Teaching Award, 2011
Grand Challenges Explorations Team, Phase 1 (2008) and Phase 2 (2010), B. & M. Gates Foundation

PROFESSIONAL SERVICE

Referee: Nature, PRL, PRX, PRD, ApJ Lett, ApJ, MNRAS, CQG, GRG, Exp. Astron., JCAP, Eur. J. Phys.
Reviewed for: NSF, NASA, NWO (Netherlands)
Moderator, arXiv Popular Physics, 2014–
Faculty Advisor, Society of Physics Students at the University of Florida, 2019–
Co-Organizer, IceCube collaboration meeting, Columbia–Stony Brook, Apr 2016
Co-Organizer, LSST detection of optical counterparts of gravitational waves, Columbia, May 2017
Organizer, AAS Winter Meeting Special Session, Multimessenger Astrophysics with LIGO, Jan 2018
Session Chair: AAS 228th Meeting, "Relat. Astrophys., Grav. Lenses & Waves, and CMB," Jun 2016
Session Chair: GR21 Conference, "Gravitational waves: Searches, data analysis…," Jul 2016

CURRENT AND PAST FUNDING

07/01/19–06/30/22, NSF 18-564 PI, "*WOU-MMA: Shedding New Light on Buried Cosmic Accelerators with Gravitational Waves and High-Energy Neutrinos*"
07/01/17–06/30/20, NSF 1740391 Co-PI, *"RAISE: Deep Gravitational Wave Exploration, Instrumental Insights and Noise Removal Through Machine Learning"*
06/15/14–, NSF 1404462 Co-PI, *"Maximizing the Early-Detection Science of Advanced LIGO"*
01/01/16–12/31/17, Columbia/University of Glasgow Research Exchange Fellowship Award
07/14/16, LSST Grant Award 2016, workshop: *"LSST Detection of Optical Counterparts of GWs"*
07/01/12–06/30/15 Columbia Science Fellowship Research Funding

APPROVED OBSERVING PROPOSALS

PI – VLA/19A-184, "Radio remnants of nearby off-axis Gamma-Ray Bursts" (2019).
Co-PI – Swift Cycle 15, $39.6K, "Searching for X-ray and UV/O counterparts of gravitational-wave and high-energy neutrino coincident signals with Swift" (2019).

GRADUATE STUDENTS

Maria Charisi (2012–2017, now at Caltech), Yang Yang (2018–), Kyung-Hwan Lee (2017–), Jinye Yang (2019–), Daniel George (2019–).

PUBLICATIONS

70 short-author-list publications, including 2 Nature, 2 Nature Communications, 4 Phys. Rev. Lett. (2 Editor's Suggestion), 4 ApJ Lett., and 1 MNRAS Lett. Over 150 LIGO collaboration papers (lead author on 6). Multimessenger Astronomy ebook downloaded over 6000 times.

PATENTS

1. *Optical Barrier to Pests*
S. Marka, Z. Marka, I. Bartos, US20120032096 A1, 2012.
2. *Systems and methods for fraud prevention, supply chain tracking, secure material tracing and…*
S. Marka, Z. Marka, I. Bartos, US8864038 B2, 2014.
3. *System for Cleansing Organisms from Water*
S. Marka, I. Bartos, Z. Marka, US20140202961 A1, 2014.

RECENT MEDIA

- *The Alchemy of Neutron Star Collisions*
  PBS Science Times, June 2019
- *Where (Some of) Earth's Gold Came From*
  Scientific American, May 2019
- *Some of your wedding ring was formed 4.6 BILLION years ago when two neutron stars crashed into…*
  Daily Mail, May 2019
- *Violent stellar collision near early solar system created actinides*
  Chemistry World, May 2019
- *Gravitational Waves, Nuclear Fire, Rocks, and Love*
  Scientific American, May 2019
- *Scientists Locate Neutron Star Collision That Could Have Created Our Solar System's Plutonium*
  Gizmodo, May 2019
- *Festive five: Physics World picks its favourite features from 2018*
  Physics World, Dec 2018
- *Physicists Spot Four Black Hole Collisions, Including the Largest One Ever Recorded*
  Gizmodo, Dec 2018
- *What happens when two black holes collide?*
  Gizmodo, Dec 2018
- *Cosmic Particle Accelerators (in Hungarian)*
  Termeszet Vilaga, Nov 2018
- *The Universe has Two New Windows (in German)*
  Zeit Wissen, Nov/Dec 2018
- *The New Era of Multimessenger Astronomy*
  Scientific American, May 2018
- *The Hungarian Academy of Sciences - Hungarian American branch has formed (in Hungarian)*
  mta.hu, Apr 2018
- *Astronomers Find Evidence of Thousands of Black Holes at the Center of Our Galaxy*
  Gizmodo, Apr 2018
- *A new cosmic messenger*
  Feature in PhysicsWorld, Jan 2018

RECENT INVITED TALKS

Out of 80+.

- *New Directions in Gravitational wave Astrophysics*
  Invited Review Talk, 36th International Cosmic Ray Conference (ICRC), July 2019
- *Multi-messenger astrophysics with gravitational waves: surprises so far*
  Invited Plenary Talk, Rencontres de Blois, June 2019
- *Multi-messenger astrophysics with gravitational waves: surprises so far*
  Invited Seminar, APC, Paris, June 2019
- *The high-energy transient universe*
  Invited Presentation, LSST Workshop, Columbia, May 2019
- *Multimessenger Astroparticle Physics in the Gravitational-wave era*
  Invited Keynote, ASTERICS Conference, Groningen, March 2019
- *Multimessenger Astrophysics with Gravitational waves*
  Invited Talk, Miami 2018, December 2018
- *Unsolved Problems for LIGO/Virgo from a Multi-messenger Perspective*

Invited Talk, Unsolved Problems in Astrophysics, July 2018

- *LIGO-Virgo's Discovery of a Binary Neutron Star Merger from a Multi-messenger Perspective*
  Invited Talk, CRIS Sicily, June 2018
- *LIGO-Virgo's Discovery of a Binary Neutron Star Merger from a Multi-messenger Perspective*
  Invited Talk, Neutrino 2018, June 2018
- *The Road Ahead for Multi-messenger Astrophysics in light of LIGO's Discoveries*
  Keynote Speech, 23rd Symposium of Astroparticle Physics in the Netherlands, March 2018
- *Multimessenger Astrophysics in Light of LIGO's Discoveries*
  Invited Colloquium, University of Virginia, March 2018
- *Electromagnetic and Neutrino Prompt Emission From Gravitational Wave Sources*
  Panel organizer and convener, PAX meeting, Penn State, February 2018
- *Multimessenger Astronomy in light of LIGO-Virgo Discoveries*
  Organizer and convener, Special Session, AAS Winter Meeting, January 2018

RECENT TEACHING

2019 FALL	Modern Astrophysics (undergraduate course)
2019 SPRING	Enriched Modern Physics (undergraduate honors course)
2018 FALL	Modern Astrophysics (undergraduate course)
2018 SPRING	Modern Astrophysics (graduate course)
2017 SPRING	Science Research Mentor, AMNH