

BEN MARGALIT

Contact
Information

btm2134@columbia.edu
benmargalit.com
(917) 932-5224

Department of Physics, Columbia University,
538 W. 120th St., MC 5294,
New York, NY, 10027

EDUCATION

2014-present	Columbia University	New York
	M.A., M.Phil & Ph.D. (expected) in Physics Advisor: Prof. Brian METZGER	
2012–2014	Hebrew University of Jerusalem	Israel
	M.Sc. in Physics, graduated <i>Cum Laude</i> Advisor: Prof. Tsvi PIRAN	
2009–2012	Hebrew University of Jerusalem	Israel
	B.Sc. in Physics	

PUBLICATIONS

- [10] **Margalit B.**, Metzger B. D., Thompson T. A., Nicholl M., Sukhbold T., “*The GRB-SLSN Connection: mis-aligned magnetars, weak jet emergence, and observational signatures*”, submitted to MNRAS
- [9] **Margalit B.**, Metzger B. D., “*Constraining the Maximum Mass of Neutron Stars from Multi-Messenger Observations of GW170817*”, ApJL, 850, L19 (2017)
- [8] Metzger B. D., Berger E., **Margalit B.**, “*Millisecond Magnetar Birth Connects FRB 121102 to Superluminous Supernovae and Long-duration Gamma-Ray Bursts*”, ApJL, 841, L14 (2017)
- [7] **Margalit B.**, Metzger B. D., “*Merger of a white dwarf-neutron star binary to 10^{29} carat diamonds: origin of the pulsar planets*”, MNRAS, 465, 2790 (2017)
- [6] **Margalit B.**, Metzger B. D., “*Time-dependent models of accretion discs with nuclear burning following the tidal disruption of a white dwarf by a neutron star*”, MNRAS, 461, 1154 (2016)
- [5] **Margalit B.**, Loeb A., “*Inferring the Distances of Fast Radio Bursts Through Associated 21-cm Absorption*”, MNRAS, 460, L25 (2016)
- [4] **Margalit B.**, Shaviv N. J., “*Constraining MOND Using the Vertical Motion of Stars in the Solar Neighborhood*”, MNRAS, 456, 1163 (2016)
- [3] Metzger B. D., **Margalit B.**, Kasen D., Quataert E., “*The diversity of transients from magnetar birth in core collapse supernovae*”, MNRAS, 454, 3311 (2015)
- [2] **Margalit B.**, Metzger B. D., Beloborodov A. M., “*Does the Collapse of a Supramassive Neutron Star Leave a Debris Disk?*”, PRL, 115, 171101 (2015)
- [1] **Margalit B.**, Piran T., “*Radio Flares of Compact Binary Mergers: the Affect of Non-Trivial Outflow Geometry*”, MNRAS, 452, 3419 (2015)

TEACHING EXPERIENCE

- 2014–2015 TEACHING ASSISTANT, Columbia University
- 2012–2014 TEACHING ASSISTANT, Hebrew University of Jerusalem
Designed and led recitation classes, graded and crafted exam questions and weekly assignments for courses: Quantum Mechanics I, Quantum Mechanics II, Classical Mechanics and Relativity, Electricity and Magnetism.
- 2012–2014 LAB INSTRUCTOR, Belmonte Science Center for Youth
Instructed high-school students through physics lab experiments, and performed introductory demonstrations for junior-high students.
- 2013 MINORITY TUTORING, Jerusalem College of Engineering
Tutored Palestinian students as part of special program aimed at decreasing first year dropout rate among Arab minority students.
- 2013–2014 TEACHING ASSISTANT, Hebrew University Student Union
Designed and taught “Marathons” — intensive exam preparation courses for Medical School students in Mechanics and Electromagnetism.
- 2011–2015 PHYSICS TUTOR
Tutored both privately and through the Israeli “Perach” program for mentorship of underprivileged students.

AWARDS AND DISTINCTIONS

- 2014 Excellence in Teaching Award, Hebrew University of Jerusalem
- 2013 Dean’s List for Graduate Students, Hebrew University of Jerusalem
- 2012 Dean’s List, Hebrew University of Jerusalem
- 2011 Dean’s List, Hebrew University of Jerusalem
- 2011 Saadia Amiel Scholarship
- 2006 Ministry of Education award for academic excellence in high-school level baccalaureate

PROFESSIONAL DEVELOPMENT (SCHEDULED[†])

- Winter 2017-18[†] 35th Jerusalem Winter School in Theoretical Physics: *The Physics of Astronomical Transients*, Israel Institute for Advanced Studies, Israel
- Summer 2016 15th annual Prospects in Theoretical Physics summer school: *Computational Plasma Astrophysics*, Institute for Advanced Study, Princeton, NJ

ACADEMIC SERVICE

- 2016-present Journal Reviewer: *ApJ Letters*, *MNRAS Letters*

CONFERENCE TALKS & WORKSHOPS

- 20/11/2017 The Astrophysics of NS Mergers; Flatiron Institute, NY
“Constraining the NS EOS with Multi-Messenger Observations of GW170817”

- 21/10/2017 Rapid Response Workshop: Binary NS Merger; Columbia University, NY
"Constraining the NS EOS with Multi-Messenger Observations of GW170817"
- 08/08/2017 TeV Particle Astrophysics 2017; Columbus, OH
"Connecting Superluminous Supernovae, Gamma-ray Bursts, and Fast Radio Bursts to the Birth of Millisecond Magnetars"
- 06/07/2017 The Physics of Extreme Gravity Stars; NORDITA, Stockholm, Sweden
"Rapidly-Evolving Transients from White Dwarf-Neutron Star Mergers"
- 18/11/2016 Radcliffe Transients Workshop; Cambridge, MA
"White Dwarf Neutron Star Mergers and Fast Optical Transients"
- 17/11/2016 Radcliffe Transients Workshop; Cambridge, MA
"Radio Counterparts of Binary NS Mergers - Aspherical Geometry"

COLLOQUIA & SEMINARS (SCHEDULED[†], INVITED^{*})

- 15/12/2017[†] TAPIR Seminar^{*}; Caltech, Pasadena, CA
title TBD
- 8/12/2017[†] Lunch Talk; Carnegie Observatories, Pasadena, CA
title TBD
- 4/12/2017[†] TAC Seminar^{*}; UC Berkeley, Berkeley, CA
title TBD
- 1/12/2017[†] FLASH Seminar; UC Santa-Cruz, Santa-Cruz, CA
title TBD
- 31/10/2017 CCAPP Seminar^{*}; Ohio State University, Columbus, OH
"White Dwarf - Neutron Star Mergers: from Peculiar Supernovae to Pulsar Planets"
- 23/10/2017 Brown Bag Lunch Talk; MIT, Cambridge, MA
"White Dwarf - Neutron Star Mergers: from Peculiar Supernovae to Pulsar Planets"
- 12/10/2017 Thunch Seminar; Princeton, Princeton, NJ
"White Dwarf - Neutron Star Mergers: from Peculiar Supernovae to Pulsar Planets"
- 15/09/2017 Astrofest 2017; Columbia University, New York, NY
"Connecting Superluminous Supernovae, Gamma-ray Bursts, and Fast Radio Bursts to the Birth of Millisecond Magnetars"
- 09/09/2016 Astrofest 2016; Columbia University, New York, NY
"White Dwarf Neutron Star Mergers and the Things that They Do"
- 13/07/2016 Explosive Astro Meeting; UC Berkeley, Berkeley, CA
"Accretion Flows Following White Dwarf Neutron Star Mergers"
- 07/04/2016 ITC Luncheon^{*}; Harvard CfA, Cambridge, MA
"Accretion Flows Following White Dwarf Neutron Star Mergers"
- 11/09/2015 Astrofest 2015; Columbia University, New York, NY
"Does the Collapse of a Supramassive Neutron Star Leave a Debris Disk?"
- 28/06/2015 GRB Meeting; Hebrew University, Jerusalem, Israel
"Does the Collapse of a Supramassive Neutron Star Leave a Debris Disk?"