

# Adam Leah W. HARVEY

## PhD Candidate in Physics | University of Maryland, Baltimore County

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iAlso known as : Adam L.W. Harvey; Adam W. Harvey

Passionate about data science and statistics, particularly in application to observations of high-energy astrophysical phenomena. Experienced in empirical spectral energy distribution modeling. Currently researching proper motions of optical-UV jets in active galactic nuclei using Hubble Space Telescope observations.

## Education

Expected 2021	PhD in Physics, University of Maryland, Baltimore County (UMBC)
2017	MS in Physics, UMBC
2013	BA in Physics, Lewis & Clark College (LC)
2013	BA in Mathematics, LC

## Service

2020-PRESENT	Member, American Astronomical Society Committee for Sexual-Orientation and Gender Minorities in Astronomy
2019-2020	Member, UMBC Community Equity Advisory Committee
2019	Member, UMBC Director of Equity and Inclusion Search Committee
2018-2019	Chair, UMBC University Steering Committee
2019	Lunch Leader, UMBC Physics Department Prospective Graduate Student Visit Day
2017-2018	Member, UMBC University Steering Committee
2017-2018	Chair, UMBC Physics Graduate Student Association Student Seminar Series
2017	Member, UMBC Graduate School Assistant Dean Search Committee
2017	Chair, UMBC Graduate Student Association Treasury Committee
2016-2017	Chair, UMBC Graduate Student Association Grants Committee
2016-2017	Senator, UMBC Graduate Student Association

## Skills

Technical Skills	C/C++, R, Fortran, Python, Perl, Git, Visual Basic Script, Visual Basic .NET, Mathematica, SQL, Bash, CMD, Power Shell, Android Studio and SDK, Windows Management Instrumentation, Dexter, Fermi Science Tools, HTML, CSS, Hubble Space Telescope image registration
Publishing and Design	LaTeX, Microsoft Office (Word, Excel, PowerPoint), Adobe Creative Cloud (Photoshop, Illustrator, InDesign)
Languages	English, Japanese
Other	Classical guitar, photography

## Publications

- “Powerful extragalactic jets dissipate their kinetic energy far from the central black hole”, Harvey, Adam L.W.; Georganopoulos, Markos; Meyer, Eileen T. (**accepted, Nature Communications**)

## Oral Presentations

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<b>NASA GODDARD VLBI SEMINAR</b>  SEPTEMBER 19, 2019 NASA GSFC, GREENBELT, MARYLAND, USA	<i>"Powerful blazar jets dissipate their kinetic power to radiation from a single location : the molecular torus"</i> 1 hour Invited
<b>A CENTENARY OF ASTROPHYSICAL JETS : OBSERVATION, THEORY, AND FUTURE PROSPECTS</b>  JULY 23, 2019 SKA GLOBAL HEADQUARTERS, CHESHIRE, UK	<i>"Powerful blazar jets dissipate their kinetic power to radiation from a single location : the molecular torus"</i> 15 (10+5) minutes Contributed
<b>MID-ATLANTIC RADIO-LOUD AGN MEETING</b>  OCTOBER 25, 2018 BALTIMORE, MARYLAND, USA	<i>"The seed factor : how a combination of four observables can unveil the location of the blazar GeV emission."</i> 10 (7+3) minutes Contributed
<b>BOSTON UNIVERSITY AGN GROUP MEETING</b>  OCTOBER 5, 2018 BOSTON, MASSACHUSETTS, USA	<i>"The seed factor : how a combination of four observables can unveil the location of the blazar GeV emission"</i> 15 (10+5) minutes Invited
<b>FERMI SUMMER SCHOOL</b>  JUNE 5, 2018 LEWES, DELAWARE, USA	<i>"The seed factor : how a combination of four observables can unveil the location of the blazar GeV emission"</i> 15 minutes Contributed
<b>MID-ATLANTIC RADIO-LOUD AGN MEETING</b>  OCTOBER 6, 2017 WASHINGTON, DC, USA	<i>"Surveying blazar constraints of the extragalactic background light"</i> 15 (10+5) minutes Contributed

## Poster Presentations

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<b>AMERICAN ASTRONOMICAL SOCIETY 233<sup>RD</sup> MEETING</b>  JANUARY 8, 2019 SEATTLE, WASHINGTON, USA	<i>"The seed factor : how a combination of four observables can unveil the location of the blazar GeV emission."</i>
<b>8<sup>TH</sup> INTERNATIONAL FERMI SYMPOSIUM</b>  OCTOBER 16-19, 2018 BALTIMORE, MARYLAND, USA	<i>"The seed factor : how a combination of four observables can unveil the location of the blazar GeV emission"</i>
<b>AMERICAN ASTRONOMICAL SOCIETY 231<sup>ST</sup> MEETING</b>  JANUARY 12, 2018 WASHINGTON, DC, USA	<i>"The seed factor : how a combination of four observables can unveil the location of blazar GeV emission."</i>

## Attendee Experiences

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- **Making Inclusive Workplaces**, *workshop*, October 15, 2019, Baltimore, Maryland, USA
- **Inclusive Astronomy 2**, *conference*, October 14-15, 2019, Baltimore, Maryland, USA
- **UMBC Graduate Student Mental Wellness Symposium**, *symposium*, September 27, 2019, Baltimore, Maryland, USA
- **NRAO Community Days**, *workshop*, June 13-14, 2019, Baltimore, Maryland, USA
- **Fermi Summer School**, *summer school*, May 29-June 8, 2018, Lewes, Delaware, USA

- São Paulo School of Advanced Science on High Energy and Plasma Astrophysics in the CTA Era, *summer school*, May 21-31, 2017, São Paulo, Brazil
- Mid-Atlantic Radio-Loud AGN Meeting, *conference*, October 14, 2016, Baltimore, Maryland, USA

## Research Experience

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2017-PRESENT | Graduate Research Assistant UMBC

- Proper motions of optical-UV AGN jets using Hubble Space Telescope data.
- Constraining the dominant location of kinetic energy dissipation in powerful blazars.

## Teaching Experience

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UMBC PHYSICS DEPARTMENT  
2016-PRESENT

*Undergraduate Mentoring*  
Mentored 3 undergraduate students

UMBC PHYSICS DEPARTMENT  
APRIL 2-4 2019

*Substitute Teaching, Cosmology (PHYS 416)*  
2 class periods  
Developed lesson plan and problem set

UMBC PHYSICS DEPARTMENT  
AUGUST 2015-AUGUST 2017

*Teaching Assistant*

UMBC PHYSICS DEPARTMENT  
APRIL 14 2017

*Substitute Teaching, Introductory Physics I (PHYS 121)*  
Substituted for large lecture section

LC STUDENT SUPPORT SERVICES  
SEPTEMBER 2011-MAY 2012

*Physics Tutor*

LC PHYSICS DEPARTMENT  
AUGUST 2010-DECEMBER 2010

*Physics Help Desk Tutor*

## Miscellaneous Achievements

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- Placed first in the First Annual UMBC Graduate Student Association Pi-Day Pi-K running event
- Invited speaker at the UMBC 2018 PhD Candidacy Ceremony
- Invited panelist at UMBC Women's Center 2018 symposium
- Invited speaker at the UMBC 2018 Graduate School Orientation
- Panelist on the Graduate Life Panel at the UMBC 2018 Graduate School Orientation
- Invited participant in the UMBC 2018 University Retreat
- Contributed code to pythonFermi.
- Contributed code to enrico.
- Invited speaker at the UMBC 2017 Graduate School Orientation
- Invited participant in the UMBC 2017 University Retreat

## Grants and Awards

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2020 | GSA Professional Development Grant (\$500)

2019 | GSA Professional Development Grant (\$100)

2017 | GSA Travel Grant (\$411.20)

## References

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**Dr. Eileen T. Meyer**

*Assistant Professor*

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**Dr. Markos Georgonapoulos**

*Associate Professor*

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**Dr. Janet C. Rutledge**

*Vice Provost and Dean of the Graduate School*

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**Dr. Jeffrey Halverson**

*Associate Dean and Professor of Geography*

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