

Justin Atsushi Otter, Curriculum Vitae

Date of Birth: July 17, 1997
Nationality: USA

Phone: (+1) 510-434-6935
Email: jotter2@jhu.edu
ORCID: [0000-0003-3191-9039](https://orcid.org/0000-0003-3191-9039)

Department of Physics & Astronomy
Johns Hopkins University
Bloomberg Center
3400 N. Charles St.
Baltimore
MD 21218, USA

RESEARCH INTERESTS

- Galaxy evolution and quenching.
- Post-starburst and transitioning galaxies.
- Star-formation.

RESEARCH EXPERIENCE

- 09/2020 - present *PhD student, Johns Hopkins University*

Advisors: Dr. Katey Alatalo and Dr. Kate Rowlands. I am studying a sample of 13 post-starburst galaxies with spatially resolved CO and optical IFU data to better understand the gas quenching processes shutting off star-formation in these galaxies.

- 08/2020 - 06/2021. *Fulbright fellow, Max-Planck-Institut für Astronomie, Germany.*

Advisor: Dr. Fabian Walter. Searched ALMA data cubes of high-redshift quasars for companion line and continuum sources to better understand the environment of high-redshift ($z > 5$) quasars.

- 09/2017 - 2019 *Undergraduate research project, Haverford College*

Advisor: Dr. Karen Masters. Used Galaxy Zoo and SDSS data to study the relationship between morphological properties of central and satellite galaxies in groups. Published in Otter et. al. 2020.

- 06/2018 - 08/2018 *REU summer student, NRAO*

Advisor: Dr. Adam Ginsburg. Used high resolution ALMA continuum images to study disk truncation processes impacting protoplanetary disks in the Orion Nebula. Publication submitted in Otter et. al. 2021.

EDUCATION

09/2020 Astronomy PhD at Johns Hopkins University, USA

08/2015 - 05/2019 BS in Astronomy and BS in Physics, Haverford College, PA USA. (Magna Cum Laude)

SELECTED PUBLICATIONS

8 refereed papers, 3 first-author papers

- **Otter, J.**, Rowlands, K., Alatalo, K., Leung, H., Wild, V., (+22 coauthors), *Resolved Molecular Gas Observations of MaNGA Post-starbursts Reveal a Tumultuous Past*, 2022, arXiv:2210.12199
- **Otter, J.**, Ginsburg, A., Ballering, N., Bally, J., Eisner, J., Goddi, C., Plambeck, R., Wright, M., *Small Protoplanetary Disks in the ONC and OMC1 with ALMA*, 2021, ApJ, 923, 221
- Venemans, B., Walter, F., Neeleman, M., Novak, M., **Otter, J.**, (+10 coauthors), *Kiloparsec-scale ALMA Imaging of [C II] and Dust Continuum Emission of 27 Quasar Host Galaxies at $z \sim 6$* , 2020, ApJ, 904, 130
- **Otter, J.**, Masters, K., Simmons, B., Lintott, C., *Galactic conformity in both star formation and morphological properties*, 2019, MNRAS, 492, 2722

GRANTS AND AWARDS

- 2022 - Space Telescope Science Institute Director's Discretionary Research Fund
- 2021 - SDSS Early Career Researcher Travel Fund
- 2020 - Agnew Prize for Excellence in Teaching
- 2019 - Fulbright Scholarship, Germany
- 2019 - Phi Beta Kappa

SELECTED PRESENTATIONS

- * *Resolved Molecular Gas Observations of MaNGA Post-starbursts Reveal a Tumultuous Past*, Epoch of Galaxy Quenching, Sep 2022
- * Poster: *Resolved Molecular Gas Observations of MaNGA Post-starbursts Reveal a Tumultuous Past*, IAUGA

XXXI, Aug 2022

* Poster: *Resolved Molecular Gas Observations of MaNGA Post-starbursts Reveal a Tumultuous Past*, AAS 240, Jun 2022

* *Resolved Molecular Gas Measurements in MaNGA Post-starbursts reveal a diversity of properties*, SDSS Collaboration Meeting, Aug 2021

* *Galactic Conformity in Both Starformation and Morphology*, AAS 233, Jan 2019

* Poster: *Studying YSOs Behind the Orion Nebula with High Resolution ALMA Data*, AAS 233, Jan 2019

TEACHING AND OUTREACH

- *Graduate Head Teaching Assistant*, teaching first-year physics lab as head TA. 9/2021 - 5/2022
- *Graduate Teaching Assistant*, teaching introductory physics lecture sections and labs. 9/2020 - 5/2021
- *Haverford College Public Observing Program Volunteer*, 2017 - 2019
- *Jansky Very Large Array Tour Guide*, 2018
- *Undergraduate Teaching Assistant*, 2018

Last updated: November 17, 2022