

# DREW LAPEER

(they/them)

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*Last Edited:* November 27th, 2024

## EDUCATION

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UNIVERSITY OF MASSACHUSETTS, AMHERST, MA	2024-
PhD, MSc, Astronomy	
UNIVERSITY OF MICHIGAN, ANN ARBOR, MI	2021-2024
BSc, Astronomy & Astrophysics (High Honors), Interdisciplinary Physics	
WASHTENAW COMMUNITY COLLEGE, ANN ARBOR, MI	2022-2023
Guest Student	
MACOMB COMMUNITY COLLEGE, MACOMB, MI	2019-2021
General Studies (Michigan Transfer Agreement)	

## PUBLICATIONS

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Tahmasebzadeh, B., **Lapeer, D.**, Valluri, M., Vasiliev, E., Taylor, M.A., Thompson, S. 2024, ‘*Determining the Lower Limit of Central Black Hole Masses Detectable in Virgo UCDs/cEs using JWST NIRSpec IFU*’, The Astrophysical Journal, 974, 60

## GRANTS, FELLOWSHIPS, & AWARDS

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2024 Walter W. Wada Award for Community Engagement, Department of Physics, University of Michigan (\$800)

## PRESENTATIONS

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*Probing the Lower Limits of Detectable Black Hole Mass with JWST NIRSpec IFU Kinematics*

**Lapeer, A.**, Valluri, M., Tahmasebzadeh, B., Vasiliev, E., and Taylor, M.A. (Poster, 2024)

*243rd AAS Meeting, New Orleans, 2024*

*Probing the Lower Mass Limit of Detectable SMBHs In Virgo Cluster CSS with JWST NIRSpec IFU Kinematics*

**Lapeer, A.**, Valluri, M., Tahmasebzadeh, B., Vasiliev, E., and Taylor, M.A. (Talk, 2023)

*Student Astronomical Society Undergraduate Talk, Ann Arbor, 2023*

*Determining the Lower Mass Limit for Central Black Hole Masses Detectable in the Virgo Cluster by JWST NIRSpec*

Tahmasebzadeh, B., **Lapeer, A.**, Valluri, M., Vasiliev, E., and Taylor, M.A. (Poster, 2023)

*The First Year of JWST Science Conference, STSc, Baltimore, Sep 2023.*

*How Low Can You Go? Lower Limits of Recoverable SMBH Mass in Virgo Cluster UCDs from JWST NIRSpec IFU Data (Updated Version)*

**Lapeer, A.**, Valluri, M., Tahmasebzadeh, B., Vasiliev, E., and Taylor, M.A. (Poster and Lightning Talk, 2023)

*Great Lakes Clusters and Streams Conference, Ann Arbor, 2023*

*How Low Can You Go? Lower Limits of Recoverable SMBH Mass in Virgo Cluster UCDs from JWST NIRSpec IFU Data*

**Lapeer, A.**, Valluri, M., Tahmasebzadeh, B., Vasiliev, E., and Taylor, M.A. (Poster, 2023)

*University of Michigan Department of Astronomy Undergraduate Poster Symposium, Ann Arbor, 2023*

## RESEARCH EXPERIENCE

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## GRADUATE RESEARCH ASSISTANT

2024-

Department of Astronomy, University of Massachusetts Amherst

Advisor: Prof. Daniela Calzetti

*Research Themes: Star formation, Star clusters, Stellar feedback, Star cluster evolution, Galaxy evolution*

## UNDERGRADUATE RESEARCH ASSISTANT

2022-2024

Department of Astronomy, University of Michigan

Advisor: Prof. Monica Valluri.

*Research Themes: Galactic dynamics, SMBHs, Dynamical SMBH detection, SMBH formation & evolution*

## TEACHING EXPERIENCE

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2022-2024 TUTOR - PHYSICS, MATH, COMPUTER SCIENCE, *Washtenaw Community College*

2023-2024 ASTRO 101 - LAB INSTRUCTOR, *University of Michigan*

2023-2024 ASTRO 102 - LAB INSTRUCTOR, *University of Michigan*

2023-2024 ASTRO 201 - LAB INSTRUCTOR, *University of Michigan*

2023-2024 MICHIGAN MATH & SCIENCE SCHOLARS - UNDERGRADUATE INSTRUCTOR, *University of Michigan*

## MENTORED STUDENTS

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2024 - JEREMY SUN, *Undergraduate, University of Massachusetts*

2024 - EMMA DAVIS, *Undergraduate, Smith College*

2024 CALLUM BLOOM, *Undergraduate, University of Michigan*

2023-2024 JENNIFER DUPUIS, *Undergraduate, University of Michigan, Co-mentored*

2023-2024 ISHIKA GUPTA, *Undergraduate, University of Michigan, Co-mentored*

2023-2024 ILAN SHANON, *Undergraduate, University of Michigan, Co-mentored*

## SERVICE & OUTREACH

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2024 ASTRONOMY GRAD SCHOOL APPLICATION GUIDE, *Primary Author*

2023-2024 ASTRONOMY MONTHLY, *Monthly astronomy outreach program at Washtenaw Community College; Founder*

2023-2024 PUBLIC OBSERVING NIGHTS, *Open to the public observatory experience in Ann Arbor, MI; Telescope Operator*

2023-2024 NOT RICH AT UMICH, *Student organization assisting low-income students at the U. of Michigan; Board Member*

2023-2024 ENTOMOLOGY CLUB, *Entomology club at U. of Michigan; Board Member*

## MEMBERSHIPS

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2023- AMERICAN ASTRONOMICAL SOCIETY, *Member*

2023- AMERICAN ASTRONOMICAL SOCIETY DIVISION ON DYNAMICAL ASTRONOMY, *Member*

## SKILLS

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LANGUAGES: Python, C++, HTML, CSS, zsh/bash, Latex

PACKAGES: numpy, astropy, matplotlib, scipy, photutils, agama, astroML

TOOLS: DS9, GALFIT, MAST, JWST Pipeline, FORSTAND

GENERAL: Data Analysis, Data Visualization, Microsoft Office