

Raphael E. Hviding

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Research

Steward Observatory

Tucson, AZ

GRADUATE STUDENT UNDER PROFESSOR MARCIA RIEKE AND POSTDOC KEVIN HAINLINE

Aug. 2018 - PRESENT

- JWST NIRCам Extragalactic Science Team member working with the JAGUAR mock catalog on galaxy shapes.
- Developing tools to extract higher-order morphological parameters from high-redshift galaxies in NIRCам images.

Dartmouth College

Hanover, NH

UNDERGRADUATE STUDENT UNDER PROFESSOR RYAN HICKOX

Apr. 2015 - Jun. 2018

- Testing Wide-field Infrared Survey Explorer infrared color selection of AGN with optical spectroscopy from SALT.
- Measuring the galactic scale effects of the AGN in NGC 1068 using SALT Fabry-Perot Spectroscopy.

Space Telescope Science Institute

Baltimore, MD

RESEARCHER STUDYING ACTIVE GALACTIC NUCLEI UNDER DR. IVA MOMCHEVA AND DR. GABRIEL BRAMMER

Apr. 2017 - Jun. 2017

- Studying the non-AGN origin of extended LIER emission using Hubble Space Telescope slitless grism spectroscopy.

Publications

“Characterizing the WISE-selected Heavily Obscured Quasar Population with Optical Spectroscopy from the Southern African Large Telescope”, **R. E. Hviding**, et al., published in the Monthly Notices of the Royal Astronomical Society, arXiv: 1711.01269

“Spatially Extended Low Ionization Emission Regions (LIERs) at $z \sim 0.9$ ”, **R. E. Hviding**, et al., published in the Astrophysical Journal, arXiv: 1810.02819

“NuSTAR and Keck Observations of Heavily Obscured Quasars Selected by WISE”, W. Yan, R. C. Hickox, K.N. Hainline, D. Stern, G. Lansbury, D. M. Alexander, **R. E. Hviding**, et al., published in the Astrophysical Journal, arXiv: 1811.02585

Conferences

Advances with SALT

Pretoria, South Africa

REFLECTING ON THE SCIENTIFIC ACHIEVEMENTS OF SALT AND LOOKING FORWARD TO NEW DEVELOPMENTS.

Nov. 2018

- Gave a 15 minute Talk on extended ionization features in NGC 1068.

Ivy League Undergraduate Research Symposium

UPenn, Philadelphia

PROMOTING UNDERGRADUATE RESEARCH AND FACILITATE A RESEARCH-ORIENTED COMMUNITY IN THE IVY LEAGUE.

Nov. 2017

- Presented a Poster on current research in astronomy.

Hidden Monsters

Dartmouth, Hanover

UNDERSTANDING OBSCURED AGN IN THE ERA OF NuSTAR AND WISE

Aug. 2016

- Assisted in organization and logistics of the conference.
- Presented a Poster on current research in the field.

Active Galactic Nuclei: What's in a name?

Garching, Germany

A WORKSHOP CENTERED AROUND FORMING A MULTI-WAVELENGTH UNDERSTANDING OF AGN

Jun. 2016

- Presented a Poster on current research in the field.

Honors & Awards

2018 **Awarded:** College of Science Fellowship

U. of AZ

2018 **Awarded:** International Travel Grant

AAS

2017 **Awarded:** E.E. Just Scholar

Dartmouth College

2016 **Awarded:** James O. Freedman Presidential Scholar

Dartmouth College

2016 **Awarded:** Neukom Travel Grant

Neukom Institute

Computing Experience

Languages: **Python, MATLAB**

Software: **IRAF, LaTeX**