

AISHWARYA IYER
CURRICULUM VITAE

ACADEMIC EXPERIENCE

ARIZONA STATE UNIVERSITY

Aug 2017 – Present

Tempe, AZ

Astrophysics, Doctor of Philosophy

CALIFORNIA STATE UNIVERSITY NORTHRIDGE

Aug 2015 – May 2017

Northridge, CA

Physics, Master of Science

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Sept 2011 – June 2015

San Diego, CA

MAJOR : Physics, Bachelor of Science

MINOR: Chemistry

RESEARCH EXPERIENCE

- **ASU-School of Earth and Space Exploration Research Assistantship** Aug 2017– present
Advisor: Dr. Michael Line
Committee: Dr. Patrick Young, Dr. Jennifer Patience, Dr. Evgenya Shkolnik
- **NASA-JPL Year-round Internship Program (JPLYIP)** Feb 2015 – Jul 2017
Primary Advisor: Dr. Mark Swain
Co-Advisors: Dr. Gael Roudier and Dr. Robert Zellem
- **CALTECH SURF Internship** June 2014 – Sept 2014
Advisor: Dr. Mark Swain
- **UCSD Department of Physics, Undergraduate Researcher** May 2013 – Dec 2014
Advisor: Dr. Adam Burgasser
- **UCSD Department of Chemistry, Undergraduate Researcher** May 2012 – Jan 2014
Advisor: Dr. Mark Thiemens

FIRST AUTHOR PUBLICATIONS

Iyer, Aishwarya; et al. (submitted to ApJ) *The SPHINX M-dwarf Spectral Grid. I. Benchmarking New Model Atmospheres to Derive Fundamental M-Dwarf Properties*

Iyer, Aishwarya & Line, Michael (2020) *The Influence of Stellar Contamination on the Interpretation of Transmission Spectra of sub-Neptune Worlds around M-dwarfs*, ApJ, 889:78, 14pp.

Iyer, Aishwarya; et al. (2016) *A Characteristic Transmission Spectrum dominated by H₂O applies to a majority of HST/WFC3 Exoplanet Observations*, ApJ, 823:109, 5pp.

PRESS RELEASE

NASA and JPL webpages, June 8, 2016: *Cloudy Days on Exoplanets May Hide Atmospheric Water* by Elizabeth Landau <http://www.nasa.gov/feature/cloudy-days-on-exoplanets-may-hide-atmospheric-water>

ACCEPTED TELESCOPE OBSERVATIONS

Mark Swain, Robert Zellem, **Aishwarya Iyer**, Pierre Drossart (Spring Semester June 2016) *Origin of Non-LTE Emission in HD 189733b*, IRTF/SpEx proposal, **4 nights awarded**

ACADEMIC SERVICE

Referee review for ApJ, 2022-ongoing

MENTORSHIP EXPERIENCE

- ASU SUNDIAL and ASU SPACE GRANT: Isabela Huckabee, Senior physics major (Fall 2019-present)
- ASU SUNDIAL: Summer 2018, Summer 2019, Spring 2019, Fall 2019, Spring 2020, Fall 2020
- Educo International Inc., Teaching Assistant –Applied Calculus for Business Majors, LAVC Spring 2011
- Los Angeles Community College District, Teaching Assistant – Intermediate Algebra Course 2010

BROADER IMPACTS

- Sexual Harassment Prevention and Bystander Program, ASU-SESE Facilitator for Inclusion workshops, Spring 2020-present
- NASA-JPL Exoplanet Science Initiative Art Exhibition, Outreach and Organizing Team Spring, Summer 2016
 - Outreach Talks at La Cañada High School, Pasadena, CA
 - Encouraging Students to create artwork inspired by exoplanet science.

HONORS AND AWARDS

- NASA Future Investigators in Earth and Space Technology Fellow, (\$90,000) 2021-2023
- Access Network Fellowship (\$1000), provided by National Science Foundation (NSF), managed by Center for Advancing Science/Mathematics Teaching, Learning, and Evaluation (CASTLE) at Rochester Institute of Technology Fa 2020/Sp 2021
- Michael McAllister The College of Liberal Arts and Sciences Early Start Scholarship Sundial Mentoring Program Fall 2020
- Physics Department Scholarship (Sundial Outreach program) Summer 2018, 2019
- ASU SESE Summer Exploration Graduate Fellowship, \$8000 Summer 2019
- ASU GPSA Travel Grant amount: \$950 Summer 2019
- ASU Graduate College Advancement to PhD Candidacy Spring 2019
- NASA-JPLYIP Graduate Student Stipend Oct 2015 – Jul 2017
- NASA-JPLYIP Undergraduate Student Stipend Feb 2015 – Sept 2015
- CALTECH SURF Scholarship Award Summer 2014
- APS FDP Scholar/ UCSD Physics Department Travel Grant April 2014
- Los Angeles Valley College, Biology Department Scholarship Spring 2011
- Los Angeles Valley College, Evergreen Sustainability Award Fall 2011
- Los Angeles Valley College, Dean's list Fall 2008, Fall 2009, Fall/Spring 2010
- Tau Alpha Epsilon Honor Society 2009-2011

SKILLS

Programming Skills:

- Fluency in Python and Fortran90, IRTF/CSHELL Instrument used for exoplanet observations, (>4 years experience in Bayesian Statistics and Hierarchical statistical models, Scikit package and basic supervised machine learning packages), Bash, Mathematica, Matlab, Aladin for Aperture Photometry, MOPEX, DS9, LaTeX, BibTeX, IDL, Basic Fortran.
- Additional skills: > 1-year working with Cryogenics, PCR, SDS PAGE, ELISA simulation, Western Blot test, DNA restriction analysis methods, Gas Chromatography, and Analytical Ion Chromatography, Mass Spectrometry.