

DR. STEVEN R. GOLDMAN

Postdoctoral fellow, Space Telescope Science Institute
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Research Interests: The effects of metallicity on the dust production, wind dynamics, and mass-loss mechanism of Asymptotic Giant Branch stars and Red Supergiants.

PROFESSIONAL PREPARATION

Space Telescope Science Institute, USA
Postdoctoral fellow

October 2017 - present

Keele University, UK
PhD in Astrophysics

October 2013 - July 2018

St. Lawrence University, USA
B. S. in Physics

September 2009 - July 2013

REFEREED PUBLICATIONS (FIRST AUTHOR: 4)

([ADS Library](#))

Goldman S. R. et al., 2019, ApJ, 884, 152
AGB Stars in the Nearby Galaxy: Leo P

citations: 1

Goldman S. R. et al., 2019, ApJ, 877, 49

citations: 5

An Infrared Census Of Dust In Nearby Galaxies With Spitzer (DUSTINGS): V. The Period-luminosity Relation For Dusty Metal-poor AGB Stars

Goldman S. R. et al., 2018, MNRAS, 473, 3835

citations: 7

A dearth of OH/IR stars in the Small Magellanic Cloud

Goldman S. R. et al., 2017, MNRAS, 465, 403

citations: **53**

The wind speeds, dust content, and mass-loss rates of evolved AGB and RSG stars at varying metallicity

REFEREED PUBLICATIONS (CO-AUTHOR: 6)

Nanni A. et al., 2019, MNRAS, 487, 502

The mass-loss, expansion velocities and dust production rates of carbon stars in the Magellanic Clouds

Dharmawardena T. E. et al., 2019, MNRAS, 489, 3218

The Nearby Evolved Stars Survey: I. JCMT/SCUBA-2 Sub-millimetre detection of the detached shell of U Antliae

Karambelkar V. R. et al., 2019, ApJ, 877, 110

SPIRITS Catalog of Infrared Variables: Identification of Extremely Luminous Long Period Variables

Orosz G. et al., 2017, AJ, 153, 1190

Astrometry of OH/IR stars using 1612 MHz hydroxyl masers. I. Annual parallaxes of WX Psc and OH138.0+7.2

Groenewegen M. A. T. et al., 2016, A&A, 596, A50

The ALMA detection of CO rotational line emission in AGB stars in the Large Magellanic Cloud

McDonald I. et al., 2015, MNRAS, 453, 4324

ALMA reveals sunburn: CO dissociation around AGB stars in the globular cluster 47 Tucanae

Other publications

Goldman S. R. and Boyer M. L., 2019, AAS Meeting 233 proceedings, 33.06

Infrared light curves of dusty & metal-poor AGB stars

AWARDED PROPOSALS (PRINCIPAL INVESTIGATOR)

2017 Very Large Telescope VISIR Project 098.D-0272 (1 night)

2017 Very Large Telescope VISIR Project 098.D-0272 (0.5 hours)

2017 Australia Telescope Compact Array Telescope Project C2996 (92 hours)

2016 Very Large Telescope XSHOOTER Project 097.D-0605 (1.5 hours)

2015 Westerbork Synthesis Radio Telescope Project R14/010 (30 hours)

2014 Southern African Large Telescope (5.5 hours)

AWARDED PROPOSALS (CO-INVESTIGATOR)

2019 *Hubble Space Telescope* Project 15891 (500 orbits)

2019 *Hubble Space Telescope* Project 15932 (40 orbits)

2018 Astrophysics Data Analysis Program (2.2 FTEs)

2013 Atacama Large Millimeter Array Project 2013.1.00319.S (5 hours)

AWARDED FELLOWSHIPS

2015 E. A. Milne Traveling fellowship (£2500)

2012 National Science Foundation Summer REU fellowship

SCIENCE COMMUNICATION

2019 Invited Colloquium, (RIT, USA)

2019 Invited Colloquium, (EAO, Hawaii)

2019 Talk, A Star Has Evolved: A Conference in the Honor of Hans Olofsson (Smögen, Sweden)

2019 Talk, HotSci (STScI, USA)

2019 Poster, AAS Winter Meeting (Seattle, USA)

2018 Poster, IAU General Assembly (Vienna, Austria)

2018 Talk, Cosmic Dust: origin, applications & implications (Copenhagen, Denmark)

2018 Talk, European Week in Astronomy and Space Science (Liverpool, UK)

2016 Talk, Blowing in the wind (ICISE, Vietnam)

Awarded Best Talk

2016 Talk, Postgraduate Research Symposium (Keele University, UK)

Awarded Best Talk

2016 Talk, SKA Delivering the Science (Cambridge University, UK)

2015 Talk, UK SKA Science Meeting (Manchester University, UK)

2015 Poster, Stellar End Products: The low mass - high mass connection (ESO, Germany)

2015 Invited Colloquium, (Kagoshima University, Japan)

2014 Poster, Why Galaxies Care About AGB Stars III (University of Vienna, Austria)

TEACHING AND OUTREACH EXPERIENCE

Earth and Space Observatory Volunteer, Keele University	February 2013 - 2017
Postgraduate Demonstrator (Physics years 1 & 2), Keele University	October 2013 - February 2015
Physics Department Tutor, St. Lawrence University	August 2012 - May 2013
Physics Department Teaching Assistant, St. Lawrence University	February 2012 - May 2013

OBSERVING EXPERIENCE

James Clerk Maxwell Telescope (70 hours)
Very Large Telescope (1 night)
Australia Telescope Compact Array (92 hours)
Parkes Radio Telescope (36 hours)
Arecibo L-band (ALFALFA) (20 hours)

CODE DEVELOPMENT (PYTHON)

The Dusty-Evolved-Star-Kit (DESK)	2017 - present
Asymptotic Giant Branch Spectral Energy Distribution (SED) fitting tool	
The Bayesian Extinction and Stellar Tool (BEAST)	2017 - present
Fits photometric SEDs of stars to extract stellar and dust extinction parameters	

ACADEMIC SERVICE

Hubble Space Telescope TAC Panel Support	October 2018
Low-Density Universe Lunch Organizer	2018-2019
Astrophysical Journal Referee	
Astronomy & Astrophysics Referee	

PROFESSIONAL AFFILIATIONS

DUSTINGS: DUST In Nearby Galaxies with Spitzer
NESS: Nearby Evolved Star Survey
BEAST: The Bayesian Extinction and Stellar Tool
GASKAP: Galactic Australian SKA Pathfinder Survey
SCYLLA: A multi-headed attack on dust evolution and star formation

American Astronomical Society (Member)	2018 - present
International Astronomical Union (Junior member)	2018 - present
Royal Astronomical Society (Fellow)	2013 - 2017