Scott Carlsten

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Present Address	**Permanent Address**
6340 Main Street	36 Loma Del Escolar
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Education

Rice University, Houston, TX — 13 May 2017
B.S. Astrophysics, *summa cum laude with distinction in research*
Thesis entitled: "H_2 and Brγ Line Offsets in Regions of
Massive Star Formation"
GPA 4.19 in major, 4.17 overall (A=4.0, A+=4.33)

Experience

Research Assistant, Rice University, Houston, TX — 05/16 - Present
Studied stochastic particle production during inflation. Modeled
evolution of fields and calculated the two-point correlation
function of fluctuations in the gravitational potential.

Teaching Assistant, Rice University, Houston, TX — 01/16 - 05/16
Teaching assistant for an introductory astronomy lab class.
Acted as telescope operator, helping students take photographic
and spectroscopic data with the campus observatory.

Research Assistant, Rice University, Houston, TX — 04/15 - 05/16
Reduced near-IR data of photo-dissociation regions and
compared with computer models to constrain physical properties
of these regions.

Research Intern, CTIO, Cerro Tololo, La Serena, Chile — 01/15 - 04/15
Analyzed kinematics and stellar population parameters of
shell galaxies to try to explain their formation by comparing
with computer models of galaxy evolution.

Research Assistant, Los Alamos National Lab, Los Alamos, NM — 04/14 - 08/14
Wrote code to rapidly stream data off of a digitizer board and
developed algorithms for the parallel processing of RF data.

Academic Honors

National Distinguished Award Winner, EnergySolutions	2010
National Merit Scholarship	2011
Los Alamos National Laboratory Foundation Platinum Scholar	2012
Max Roy Scholarship for full tuition, Rice	2012-2016
Presidential Honor Roll, Rice	Fall 2012 - Fall 2015
Bonner Book Award for Outstanding Junior in Physics, Rice	2015
Claude W. Heaps Prize for Outstanding Senior Thesis in Physics, Rice	2016

Computer Skills

<u>Languages:</u>	Python, Mathematica, MATLAB, LaTeX
<u>Software:</u>	IRAF, including optical, near-IR, and spectroscopic data

Coursework

Introductory physics, waves and optics, multivariable calculus, differential equations,

partial differential equations, mechanics, quantum mechanics, stellar interiors and stellar evolution (graduate level), galaxies and cosmology (graduate level), statistical mechanics and thermodynamics, electromagnetism, plasma physics (graduate level), and quantum field theory (graduate level)

Presentations & Publications

Presentations:

- 2016 AAS Winter Meeting. Poster: "Stellar Populations of Shell Galaxies"

- 2015 Rice Departmental Seminar: "Stellar Populations of Shell Galaxies"

Publications:

- **S. Carlsten**, G. Hau, & A. Zenteno, *Stellar Populations of Shell Galaxies* [arXiv:1611.05437] MNRAS, submitted.