

Scott Carlsten
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Education **Princeton University**, Princeton, NJ 2022
Ph.D Astrophysics (expected)

Rice University, Houston, TX 13 May 2017
B.S. Astrophysics, *summa cum laude with distinction in research*
Thesis entitled: “H₂ and Br γ Line Offsets in Regions of
Massive Star Formation”
GPA 4.19 in major, 4.17 overall (A=4.0, A⁺=4.33)
Physics GRE 990/990

Experience **Research Assistant**, Princeton University, Princeton, NJ 07/17 - Present

Research Assistant, Rice University, Houston, TX 04/15 - 05/17
Reduced near-IR data of photo-dissociation regions and compared with computer models to constrain physical properties of these regions.
Studied stochastic particle production during inflation. Modeled evolution of fields and calculated the two-point correlation function of fluctuations in the gravitational potential.

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.

Academic Honors National Merit Scholarship 2011
Los Alamos National Laboratory Foundation Platinum Scholar 2012
Max Roy Scholarship for full tuition, Rice 2012-2016
Bonner Book Award for Outstanding Junior in Physics, Rice 2015
Claude W. Heaps Prize for Outstanding Senior Thesis in Physics, Rice 2016
Alan Dessler Prize for Top Astrophysics Graduate, Rice 2017

Computer Skills Languages: Python, Mathematica, MATLAB, L^AT_EX
Software: IRAF, including optical, near-IR, and spectroscopic data

Presentations & Publications Presentations:

- 2017 Rice Departmental Seminar: “Line Offsets in Regions of Massive Star Formation”

- 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 (2017), MNRAS **472** 2889, arXiv:1611.05437
- **S. Carlsten**, M. Strauss, R. Lupton, J. Meyers, S. Miyazaki (2018), MNRAS **479** 1491, arXiv:1804.04277
- **S. Carlsten**, P.M. Hartigan (2018), ApJ **689** 77, arXiv:1810.11464
- **S. Carlsten**, R.L. Beaton, J.P. Greco, J.E. Greene (2019), ApJ *submitted* arXiv:1901.07575
- **S. Carlsten**, R.L. Beaton, J.P. Greco, J.E. Greene (2019), ApJL *submitted* arXiv:1901.07578