

# Jay Franck

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Born: October 15, 1987—Traverse City, MI

## Current position

*Astronomy PhD Candidate* Case Western Reserve University

## Areas of specialization

High Redshift Protoclusters; Extragalactic Novae.

## Education

2010 BS in Astrophysics, Michigan State University  
2012 MS in Astronomy, San Diego State University

## Grants, honors & awards

2011 Ruth and Clifford Smith Graduate Fellowship  
William F. Lucas Scholarship  
Awona W. Harrington Award for Service  
Reginald F. Buller Award for Service  
Sigma Xi, Grants-In-Aid of Research Recipient

## Publications

2012 Franck, J. R.; Shafter, A. W.; Hornoch, K.; Misselt, K. A., “The Nova Rate in NGC 2403”, *Astrophysical Journal* 760: 13F  
Franck, J. R.; McGaugh, S. S.; Schombert, J. M., “Three candidate clusters around high redshift radio-loud sources: MG1 J04426+0202, 3C 068.2, MS 1426.9+1052”, *Astronomical Journal* Submitted  
Franck, J. R.; McGaugh, S. S., “The Candidate Cluster and Protocluster (CCPC) Catalog of spectroscopically identified structures spanning  $2.74 < z < 3.71$ ”, *Astronomical Journal* Submitted

## Observing Experience

- 2010-2012 Mount Laguna Observatory 40 inch Telescope, *Eclipsing Binary Light Curves*
- 2013 KPNO Burrell-Schmidt Telescope, *Surface Brightness Profiles of M33, Light Echoes around the Crab Nebula*
- 2014 Combined Array for Research in Millimeter-wave Astronomy (CARMA) , *Measurements of the Sunyaev-Zel'Dovich Effect in High Redshift Clusters*
- 2015 CTIO Blanco 4-meter with DECam, *Probing High Redshift Quasars for Galaxy Overdensities*

## Computational Skills

### LANGUAGES

*Python/NumPy, MATLAB, LaTeX, Fortran 77/90, JavaScript, IRAF, R, C++*

### EXPERIENCE

*Machine Learning, Data Mining, Numerical Recipes, Data Science, Scripting*

## Teaching

- 2010-2012 Introductory Astronomy Laboratory for non-Majors
- 2011 Introductory Astronomy Lecture for non-Majors-Temporary Lecturer

## Academic Organizations

- 2006-2010 Society of Physics Students (SPS), Michigan State University
- 2011-2012 Schwartz Astronomical Society (SAS), San Diego State University
- 2013-2015 Graduate Student Senate (GSS) Senator, Case Western Reserve University
- 2015-present Graduate Student Council Representative, Case Western Reserve University

## Outreach

- 2011-2012 Mount Laguna Observatory, Public Telescope Night Presenter
- 2011-2012 San Diego Science Festival of Science and Engineering, Planetarium Presenter