# Benjamin Rose

### Physics PhD Candidate at Notre Dame OrcidID: 0000-0002-1873-8973

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University of Notre Dame, Notre Dame, IN

Advisor: Peter Garnavich

B.S. in Physics May 2012

cum laude

Whitworth University, Spokane, WA

Minor: Mathematics

Observational Experience

#### Vatican Advanced Technology Telescope (VATT)

Mount Graham International Observatory

• June 27, 2014 - July 1, 2014

Activities & Outreach

Graduate Physics Society, Executive Board Member	2015 - present
American Astronomical Society, Junior Member	<b>2014</b> - present
Graduate Student Union, Physics Department Representative	2013 - 2014
American Physical Society, Member	2011 - 2014
Notre Dame Summer Band	2013 & 2014
Whitworth University Wind Symphony	2009 - 2012
Physics Outreach	Spring 2012

- Worked with middle school students on high altitude weather balloon experiments.
- Developed & built radiation, ozone detector systems, and temperature sensors.

Club Treasurer, Whitworth University 2009 - 2011

Awards

Notebaert Professional Development Award, Notre Dame	2015
GSU Conference Presentation Grant, Notre Dame	2015
Poster Grant, GSU 6th Annual Research Symposium	2014
Presidential Scholarship, Whitworth University	2008 - 2012
Delbert E. Friesen Memorial Scholarship, Whitworth University	2011 - 2012
Talent Scholarship in Physics, Whitworth University	2008 - 2011
Talent Scholarship in Music, Whitworth University	2009 - 2012
Laureate Society, Whitworth University	4 semesters

• Having a semester GPA of 3.75 or greater

Computer Skills

Daily Use: Python, git, Astropy, LATEX, Markdown, OS X

Proficient: Jekyll, Jupyter, pandas, Linux

Basic Knowledge: Windows, C++, ROOT, Mathematica, MATLAB, Javascript Some Experience: LabVIEW, Apple Script, Julia, Parallel Computing, Swift

#### **Talks**

#### Searching For a Cosmic-scale Dark Flow

November 20, 2015

2015 APS Prairie Section Meeting The University of Notre Dame South Bend, IN

#### Finding A Cosmic Bulk Flow

April 28, 2014

2014 GPS Spring Conference The University of Notre Dame South Bend, IN

last updated: October 3, 2016

## Determining the Location of a Radioactive Source in Majorana Demonstrator

August 2, 2011

Research Experience for Undergraduates Culminating Talks Duke University Durham, NC

• APS style presentation of summer research

#### Poster Presentations

Correlating Type Ia Supernova Properties with Their Local Environment Using HST Snapshots of Host Galaxies. Rose, B.,& Garnavich, P. AAS 227th Meeting, Kissimmee, FL. January 6, 2016

Prospects for Detecting a Cosmic Bulk Flow. Rose, B., Garnavich, P., Mathews, G. J. AAS 225th Meeting, Seattle, WA. January 6, 2015

Finding A Cosmic Bulk Flow. Rose, B., Garnavich, P., Mathews, G. J. Graduate Student Union 6th Annual Research Symposium, University of Notre Dame, South Bend, IN. February 27, 2014

Determining the Location of a Radioactive Source in Majorana Demonstrator Rose, B. APS, Division of Nuclear Physics. Michigan State University, East Lansing, MI. October 27, 2011

#### **Publications**

Detectability of Cosmic Dark Flow in the Type Ia Supernova Redshift-Distance Relation. Mathews, G.J., Rose, B., Garnavich, P., et al. 2016 ApJ 827 60.

The New Eclipsing CV MASTER OTJ192328.22+612413.5: A Possible SW Sextantis Star. Kennedy, M. R., Callanan, P., Garnavich, P. M., et al. 2016, AJ, 152, 27

Mathews, G. J., Gangopadhyay, M. R., Garnavich, P., Rose, B., et al. Int. J. Mod. Phys., A30, (2015)

High-Amplitude, Rapid Photometric Variation of the New Polar MASTER OT J1321. Littlefield, C., Garnavich, P., Magno, K., et al. 2015, Information Bulletin on Variable Stars, 6129, 1