Benjamin Rose

Physics PhD Candidate at Notre Dame
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Education

5rd year Ph.D. Student
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 — **2014 - 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: Linux, Windows, Jekyll
Basic Knowledge: 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

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, 2016

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