

Charlotte M. Wood | CV

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Education

University of Notre Dame

Ph.D. Physics

Advisor: Dr. Peter Garnavich

Notre Dame, IN

2016-present

Hofstra University

B.S. Physics, Minor in Astronomy

Magna Cum Laude, High Departmental Honors, Honors College Graduate with Distinction

Advisor: Dr. Stephen S. Lawrence

Hempstead, NY

2012-2016

Publications

- **Benchmarking Substellar Evolutionary Models Using New Age Estimates for HD 4747 B and HD 19467 B**, C. M. Wood, T. Boyajian, K. von Braun, J. M. Brewer, J. R. Crepp, G. Schaefer, A. Adams, & T. R. White (doi:10.3847/1538-4357/aafe01)
- **The TRENDS High-Contrast Imaging Survey. VIII. Compendium of Benchmark Objects**, E. J. Gonzales, J. R. Crepp, E. B. Bechter, C. M. Wood, J. A. Johnson, B. T. Montet, H. Isaacson, & A. W. Howard (ApJ, accepted)
- **High-Time-Resolution Photometry of AR Scorpii: Confirmation of the White Dwarf's Spin-Down**, R. A. Stiller, C. Littlefield, P. Garnavich, C. M. Wood, F.-J. Hambsch, & G. Myers (doi:10.3847/1538-3881/aad5dd)

Talks and Presentations

- **"The Evolution of the Light Echo Around Type Ia Supernova 1998bu"**
 - Poster, 235th Meeting of the American Astronomical Society, Honolulu, HI, Jan. 2020
- **"The Slowly Fading Light Echo Around Type Ia Supernova 2009ig"**
 - Poster, Midwest Workshop on Supernovae & Transients, Ohio State University, Sep. 2019
 - Seminar, University of Notre Dame, Mar. 2019
 - Talk, Midwest Workshop on Supernovae & Transients, University of Chicago, Feb. 2019
 - Poster, 233rd Meeting of the American Astronomical Society, Seattle, WA, Jan. 2019
- **"Benchmarking Substellar Evolutionary Models Using New Age Estimates for HD 4747 B and HD 19467 B"**
 - Talk, College of Science and Engineering Joint Annual Meeting, University of Notre Dame, Dec. 2018
 - Poster, AWIS Women in Science Regional Conference, University of Notre Dame, Oct. 2018
- **"Precise Ages for the Benchmark Brown Dwarfs HD 19467 B and HD 4747 B"**
 - Poster, 231st Meeting of the American Astronomical Society, Washington D.C., January 2018

Other Research Experience

Observing Runs at the Large Binocular Telescope

University of Notre Dame

Tucson, AZ

Oct. 2018, Mar./Oct./Dec. 2019

Remote observing from the University of Arizona for projects submitted by OSURC member institutions. Total of 20 nights using LBC & MODS.

The Origin of Metals in Extremely Low Mass White Dwarfs

University of Oklahoma

Norman, OK

Summer 2015

Research Experience for Undergraduates – Advisor: Dr. Mukremin Kilic

Looked for evidence of debris disks around extremely low mass white dwarfs as a source of calcium excess.

Awards

Sigma Xi Grant in Aid of Research

University of Notre Dame

Fall 2019

Grant from Sigma Xi to pay for travel expenses to and from a research site, or for purchase of non-standard laboratory equipment necessary to complete a specific research project.

Arthur J. Schmitt Leadership Fellowship

University of Notre Dame

Spring 2016

This fellowship is awarded to the top 15 students in the ND Colleges of Science and Engineering each year.

Teaching Experience

Physics Teaching Practicum

University of Notre Dame

Notre Dame, IN

Fall 2018 - Spring 2020

Covered six lectures under observation of another instructor and created a teaching portfolio. Classes: Elementary Cosmology (2; undergraduate), Introduction to Astrophysics (3; undergraduate), Physics of Astrophysics (1; undergraduate/graduate)

Teaching Assistant for Physics Classes

University of Notre Dame

Notre Dame, IN

August 2016-present

Responsibilities include setting up lab equipment, grading, helping proctor exams, and organizing help sessions for students. Classes: Descriptive Astronomy (undergraduate), Lasers & Modern Optics (undergraduate), Physics of Astrophysics (graduate), Modern Observational Techniques (undergraduate/graduate).

Skills

Computer Languages/Programs: Python, IRAF/PyRAF, \LaTeX , Mathematica, MATLAB, IDL, Git.

Spoken Languages: English (native), Spanish (limited working proficiency), Italian (elementary).

Activities & Outreach

Graduate Physics Society Executive Board

University of Notre Dame

Notre Dame, IN

Summer 2018 - Present

Serving as the astronomy group representative on the executive board for the physics graduate student organization. E-board acts as a bridge between the graduate students and the department and helps organize all GPS events.

Association for Women in Science Physics Department Representative

University of Notre Dame

Notre Dame, IN

Fall 2019 - Present

Department representatives act as a liaison between AWIS and their respective departments and help organize & promote professional development events that support women in science.

Public Observing Events

University of Notre Dame

Notre Dame, IN

Coordinated observing events for the public. Includes an observing event for high school summer camp students, two large general public observing events, and a Mercury transit viewing.

Science Demonstration Events

University of Notre Dame

Notre Dame, IN

Set up and ran demos for children. Includes running a session for Expanding Your Horizons (science workshops for middle school girls), staffing a booth at Science Alive (general science demos for the public), running a session for Art-2-Science (week-long science crafts camp for elementary & middle schoolers), setting up demos for an event celebrating the 50th anniversary of the Moon landing, and setting up demos for Our Universe Revealed (public lecture series).

Professional Organizations

- **Sigma Xi**

Sigma Xi, The Scientific Research Honor Society, is the international honor society of science and engineering.

- **Association for Women in Science**

AWIS is dedicated to driving excellence in STEM by achieving equity and full participation of women in all disciplines and across all employment sectors.

- **American Astronomical Society**

AAS is the major organization of professional astronomers in North America. Their mission is to enhance and share humanity's scientific understanding of the universe.

References

- **Dr. Peter Garnavich**

Professor of Physics, Department Chair
University of Notre Dame
Notre Dame, IN

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- **Dr. Stephen S. Lawrence**

Professor of Physics and Astronomy
Hofstra University
Hempstead, NY

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Office: 217A Berliner Hall
Phone: (516) 463-5584
E-mail: stephen.s.lawrence@hofstra.edu

- **Dr. Mukremin Kilic**

Assistant Professor of Physics and Astronomy
University of Oklahoma
Norman, OK

- Contact info:

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Phone: (405) 325-6611
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