

Mackenna L. Wood

CONTACT INFORMATION

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EDUCATION

University of North Carolina at Chapel Hill 2018 - present
M.S., Physics and Astronomy, 2020
Masters Title: *Monte Carlo Simulation of Unseen Binaries - Using Imaginary Friends to find Invisible Things*
Clarkson University 2014 - 2018
B.A., Physics, 2018

PUBLICATIONS

First Authored Publications:

Design of High Quality Chemical XOR Gates with Noise Reduction. Wood, M. L., Domanskyi, S., & Privman, V. (2017), ChemPhysChem, 18(13), 1773–1781.

Other Publications:

Experimental Realization of a High-Quality Biochemical XOR Gate. Filipov, Y., Domanskyi, S., Wood, M. L., Gamella, M., Privman, V., & Katz, E. (2017). ChemPhysChem, 18(20), 2908–2915.

TESS Hunt for Young and Maturing Exoplanets (THYME): A Planet in the 45 Myr Tucana–Horologium Association. Newton, E. R., Mann, A. W., Tofflemire, B. M., et al. (2019), ApJ, 880(1), L17.

TESS Hunt for Young and Maturing Exoplanets (THYME) II: A 17 Myr Old Transiting Hot Jupiter in the Sco-Cen Association. Rizzuto, A. C., Newton, E. R., Mann, A. W., et al. (2020). (Accepted to AAS)

TESS Hunt for Young and Maturing Exoplanets (THYME) III: A two-planet system in the 400 Myr Ursa Major Group. Mann, A. W., Johnson, M. C., Vanderburg, A., et al. (2020). (Accepted to AJ)

The orbit and stellar masses of the archetype colliding-wind binary WR 140. Thomas, Jousha. D., Richardson, N. D., Sana, H., et al. (2020). (accepted to MNRAS)

An additional 2 papers for which contributions were minor are not listed.

PRESENTATIONS

Improving Planet Parameters through Composite Limits on Stellar Companions, M.L. Wood, A. W. Mann
Poster, AAS 235 Meeting in Honolulu, HA. January, 2020

Making Lemonade out of LEMON: Improved Photometry Processing Software, M.L. Wood, J. Thomas

Poster presented at RAPS Conference Spring 2018, Clarkson University;

Oral Presentation at RAPS Conference Spring 2018, Clarkson University;

Poster presented at NYSS APS and ASNY Joint Conference, Fall 2017, Union College

Winner of Best Poster in Session, RAPS Spring 2018

Winner of Audience-Choice Best Poster, RAPS Spring 2018

Analysis of Chemical Reactions for a Biochemical XOR Logic Gate, M. L. Wood

Poster presented at SURE Conference August 2016, Clarkson University

Oral presentation SURE Conference August 2016, Clarkson University

Crash and Bounce: The interaction between vortex rings and solid walls at various distances, M. L. Wood

Poster presented at SURE Conference August 2014, Clarkson University

WORKSHOPS AND TRAINING

Penn State’s Summer School in Statistics for Astronomers
Standard Safe Zone Training, UNC Chapel Hill LGBTQ Center

June 2020
February 2020

HONORS AND AWARDS

NSF GRFP Honorable Mention 2020
Physics Department Outstanding Senior Award, Clarkson University, 2018
Kristin Bandy Craig Memorial Award, Clarkson University, 2017

UNC Chapel Hill

Sigurds Arajs Memorial Award, Clarkson University, 2014

OBSERVING EXPERIENCE

PI Observing:

SOAR Goodman - 3 Nights (Awarded, Pending)

Other Observing:

SOAR Goodman - 13 Nights

Keck NIRSPEC -

Keck NIRC2 - 4 Nights

SCIENTIFIC OUTREACH

Astronomy on Tap Triangle Organizing Committee

Fall 2019-present

Astronomy on Tap Triangle Primary Talk

December 2019

Astronomy Guest Nights, Morehead Observatory, UNC

Fall 2018 - Spring 2019

Mobile Planetarium Show, Fort Ann Central School District

June 2018

Camp Counselor, IMPETUS Program, Clarkson University

July 2017 - December 2017

TEACHING

Astronomy 101 Lab TA

Fall 2018, Spring 2019