Trevor Dorn-Wallenstein Curriculum Vitae

University of Washington
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Education

University of Washington
Ph.D. Candidate, Astronomy, est. 2020
M.S., Astronomy, 2016

Wesleyan University
B.A., Astronomy, 2015
B.A., Physics, 2015

Research

University of Washington
Supervisor: Prof. Emily Levesque
Massive stars, binary stars, stellar populations, stellar evolution, supermassive black hole binaries, Thorne-Żytkow objects. Developing observing programs to measure the binary fraction of massive stars using evolved stellar populations.

Wesleyan University
Supervisor: Prof. Roy Kilgard
X-ray Astronomy, X-ray binaries, X-ray source populations. Combining archival *Chandra X-ray Observatory* and *Hubble Space Telescope* data to study the X-ray source population of M51.

Colgate University
Supervisor: Prof. Jeff Bary
Near-Infrared Spectroscopy, star formation, molecular clouds. Measuring extinction through molecular cloud cores to accompany mid-Infrared measurements of silicate absorption.

Publications and Presentations

Dorn-Wallenstein, T. Z., & Levesque, E. M., "Stellar Population Diagnostics of the Massive Star Binary Fraction," 2018, ApJ, 867, 125D

Dorn-Wallenstein, T. Z., Levesque, E. M., & Ruan, J. J., "A Mote in Andromeda's Disk: A Misidentified Periodic AGN behind M31," 2017, ApJ, 850, 86D. Press: http://chandra.si.edu/blog/node/664

Morris, B. & Dorn-Wallenstein, T. Z., "`aesop`: ARC Echelle Spectroscopic Observation Pipeline," Journal of Open Source Software, 3(28), 854, https://doi.org/10.21105/joss.00854

Binder, B., Levesque, E. M., & Dorn-Wallenstein, T. Z., "No Strong Geometric Beaming in the Ultraluminous Neutron Star Binary NGC 300 ULX-1 (SN 2010da) from Swift and Gemini," 2018, ApJ, Accepted

Dorn-Wallenstein, T. Z., Levesque, E. M., & Ruan, J. J., "A Mote in Andromeda's Disk: A Periodic AGN Behind M31," 2018, Contributed Poster, AAS #231

Dorn-Wallenstein, T. Z. & Levesque, E. M., "There Are (super)Giants in the Sky: Searching for Misidentified Massive Stars in Algorithmically-Selected Quasar Catalogs," 2016, Contributed Talk, IAU Symposium 329 X-ray Splinter Session

Dorn-Wallenstein, T. Z., "Characterizing the X-ray Source Population of The Whirlpool Galaxy," 2015, Wesleyan University Honors Thesis

Dorn-Wallenstein, T. Z., Kilgard, R. E., Martlin, C., Kuntz, K. D., Schulman, G., & M51 Chandra VLP Collaboration, "Properties of the Discrete X-ray Source Population of M51," 2015, Contributed Poster, AAS #225

Dorn-Wallenstein, T. Z., Morris, C., Rivera, A., Zengilowski, G., Bary, J., "The Silicate-Extinction Relationship in Isolated Molecular Cloud Cores," 2014, Invited Poster, Committee on Undergraduate Research REU Symposium

Teaching, Outreach, and Service

Astronomy Department, University of Washington
Research Mentor, Pre-Major in Astronomy Program, 2017
Coordinator, Prospective Graduate Student Visit, 2017 - Present
Teaching Assistant, Astronomy 101/150, 2015-2017

Astronomy on Tap SEA
Organizer/Social Media coordinator for large (300-person) monthly public outreach event, 2016 - Present

Honors and Awards

High Honors
Wesleyan University, 2015
Littell Prize
Wesleyan University, 2015, for excellence in one or more advanced courses in Astronomy.
Presenter
Committee on Undergraduate Research REU Symposium, 2014

Software

Python, SQL/ADQL, IDL, UNIX, IRAF, TensorFlow, ciao/XSpec

Miscellaneous

Telescope Operator (Van Vleck Observatory), Drums (12 years, nightlunchband.com)