

[illegible]

	<p>Yale University June 2018-July 2021 Long-term Project under Professors Greg Laughlin & Songhu Wang</p> <ul style="list-style-type: none"> • Performed detailed analysis of photometry & radial velocity data to determine planetary parameters for the hot Jupiter system XO-3b. • Uncovered promising insights into the formation mechanisms of hot Jupiters through our system's unique orientation.
	<p>Harvard-Smithsonian Center for Astrophysics June 2019-Aug 2019 Summer Project under Dr. Grant Tremblay</p> <ul style="list-style-type: none"> • Investigated AGN-driven outflows from galactic centers, shedding light on their influence on host galaxy dynamics. • Analyzed MUSE data cubes from the VLT to derive stellar kinematics and AGN outflows in merging galaxies.
OUTREACH & PROFESSIONAL SERVICE	<p>Yale University Jan 2020-May 2021 Undergraduate Affairs Committee Member</p> <ul style="list-style-type: none"> • Planned initiatives to integrate undergrads into department through projects such as panels, an online undergraduate wiki, and research facilitation between younger undergrads and faculty <p>Yale University Sept 2018-Dec 2019 Planetarium Events Manager</p> <ul style="list-style-type: none"> • Coordinated events at Yale Observatory with local elementary and high school groups, different Yale departments, and student assistants • Assisted with logistical implementation of weekly departmental colloquia <p>CodeSouth March 2019 Education Nonprofit</p> <ul style="list-style-type: none"> • Lead coding workshops in under-resourced Mississippi high school to break down intimidation factor of coding using primarily Python & Scratch
REFEREED PUBLICATIONS	<p>Worku, K., Kamiokowski, M., Sabti, N. (2024, in-prep). <i>Relic neutrino overdensities around spherical dark matter halos</i></p> <p>Worku, K., Coe, D., Hsaio, T., Resseguier, T., et al. (2024, in-prep). <i>JWST MACS0647 High-z Candidates: Insights into EoR</i></p> <p>Worku, K., Wang, S., Burt, J., Rice, M., et al. 2022 (accepted by <i>AJ</i> on Jan 18, 2022). <i>Revisiting the Full Sets of Orbital Parameters for the XO-3 System: No Evidence for Temporal Variation of the Spin-Orbit Angle</i></p> <p>Wang, S., Jones, M., Shporer, A., et al. (incl Worku, K.) 2019 <i>AJ</i> 157, 2. <i>HD 202772A b: A Transiting Hot Jupiter Around A Bright, Mildly Evolved Star In A Visual Binary Discovered By TESS</i></p>