Weichen Wang **Curriculum Vitae**

CONTACT INFORMATION

Department of Physics and Astronomy,
Johns Hopkins University

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https://weichenstars.github.io

EDUCATION

Johns Hopkins University, Baltimore MD, United States
Department of Physics and Astronomy, 9/2016 - 9/2022 (expected)
Ph. D. in Astrophysics
Thesis Advisors: Susan Kassin, Timothy Heckman

Tsinghua University, Beijing, China
Department of Physics, 8/2012 - 7/2016
B. Sc. in Physics (graduated with honors)
Thesis Advisor: Shude Mao

RESEARCH EXPERIENCE

Johns Hopkins University, Baltimore MD, United States 9/2016–now
Department of Physics and Astronomy, Graduate Researcher
Research topics: galactic winds at $z \sim 1$; dust attenuation of galaxies at $z \sim 1$
Advisor: Susan Kassin

University of California, Santa Cruz CA, United States 2/2020-3/2021; 7-9/2015
Department of Astronomy, Visiting Student
Research topics: galactic winds at $z \sim 1$; spatially resolved star formation and dust attenuation of $z \sim 1$ galaxies
Hosts: Sandra Faber, David Koo

Tsinghua University, Beijing, China 6/2014 - 7/2016
Tsinghua Center for Astrophysics, Undergraduate Researcher
Research topic: impacts of dark matter halo substructures on gravitational lensing systems
Advisor: Shude Mao

PUBLICATIONS

W. Wang, S. A. Kassin, S. M. Faber, D. C. Koo et al., ApJ in press (2022) [arXiv: 2109.12133]:
The Baltimore Oriole's Nest: Cool Winds from the Inner and Outer Parts of a Star-Forming Galaxy at $z = 1.3$

W. Wang, S. A. Kassin, C. Pacifici et al., ApJ, 869, 161 (2018) [arXiv: 1811.03671]:
Galaxy Inclination and the IRX-β Relation: Effects on UV Star Formation Rate Measurements at Intermediate to High Redshifts

W. Wang, S. M. Faber, F.-S. Liu et al., MNRAS, 469, 4063 (2017) [arXiv: 1705.05404]:
UVI colour gradients of $0.4<z<1.4$ star-forming main-sequence galaxies in CANDELS: dust extinction and star formation profiles

Click this ADS link for the full list of publications (10 in total as of 3/2022).

OBSERVATIONS AND PROPOSALS

JWST Cycle-1 proposal (Co.I. with major contribution; P.I.: Susan Kassin), 74.3 hours:
A Pathfinder for JWST Spectroscopy: Deep High Spectral Resolution Maps of Galaxies over $1<z<6$, scheduled for 2022

ALMA Cycle-8 proposal (Co.I.; P.I.: Raymond Simons), 23.1 hours:
CO Kinematics at Cosmic Noon: Timing the Redistribution of Metals Around Galaxies, scheduled for 2022

ALMA Cycle-7 proposal (P.I.), 14.7 hours:
Does molecular gas follow the motion of ionized gas inside typical high-redshift star-forming galaxies?
Observations not completed due to weather and the impact of COVID-19 in Chile, 2021

NASA ADAP proposal (Co.I. with major contribution; P.I.: Susan Kassin), $485k:
Expelling Gas from Galaxies in the Distant Universe: Resolved Winds and Kinematics at $z\sim 1$*,* 2020-2022

Observations at the ARC 3.5m telescope, Apache Point Observatory, NM, 11/2016

Talks

Astronomy Seminar, University of California, Riverside, CA (remote), 2021
Steward/NOIRLab Galaxy Group Lunch Talk, University of Arizona, AZ (remote), 2021
Baltimore Wind Workshop (contributed talk), Baltimore, MD, 2021
Conference "Massively Parallel Large Area Spectroscopy from Space" (contributed talk), Institute of Astrophysics and Space Sciences, Portugal (remote), 2021
Astrophysics Seminar at University of Missouri, MI (remote), 2020
Conference "The Art of Measuring Physical Parameters in Galaxies" (contributed talk), UC Riverside, CA, 2018
Santa Cruz Galaxy workshop (contributed talk), Santa Cruz, CA, 2018
AAS Meeting 231 (contributed talk), Washington DC, 2018
Conference "Dusting the Universe" (contributed talk), University of Arizona, AZ, 2018
Conference "Plumbing Star-Formation Rates in the Age of JWST " (contributed talk), Texas A&M University, TX, 2017
JHU/STScI Galaxy Journal Club, Baltimore, MD, 2017, 2021
Lunch talks, Tsinghua University and Peking University/KIAA, Beijing, China, 2017

Scholarships and Awards

The IAU travel grant, 2019.
First-year graduate student award, the JHU Department of Physics and Astronomy, 2016.
National Astronomical Observatory of China Scholarship, 2016.

Mentorship

Ying Qin, JHU undergraduate in physics major, since 2021:
Studying the Mg II emission and leaking ionizing photons from low-mass galaxies at $z \sim 1$*.*

Teaching Experience

Teaching Assistant, General Physics I for Biological Science Majors (171.103)
Johns Hopkins University, Fall 2016

Teaching Assistant, General Physics Laboratory (171.111)
Johns Hopkins University, Fall 2016

Outreach Activities

Member of the Astro Scholars program since 2021
An annual week-long program about astrophysics and computer programming for undergraduates from under-represented backgrounds; serving as a core member of the hiring & education team; monthly tag-up with the students during the rest of the year

Member of the Physics and Astronomy Graduate Students (PAGS) Outreach Team, Johns Hopkins University, 2017-2019
Supporting visits of students from Baltimore local primary/middle schools around once per semester and teaching fundamental physics with educational demos

The JHU Physics Fair, 2016-2019
Annual event open to the JHU and Baltimore local communities; teaching fundamental physics and astronomy with educational demos

Volunteer teacher at the Pengzhai Primary School, Guizhou, China, Summer/2013
Teaching multiple STEM-related courses for Grade 3-6; the school, with very limited resources, is located in one of the least developed areas of the country.