Weichen Wang (Updated August, 2021) **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, 8/2016 - 8/2022 (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 $z \sim 1$ using KECK/DEIMOS; dust attenuation law and dust geometry of $z \sim 1$ galaxies
Advisor: Susan Kassin

University of California, Santa Cruz CA, United States 7/2015- 9/2015; 1/2017
Department of Astronomy, Visiting Student
Research topic: spatially resolved star formation and dust attenuation of $z \sim 1$ galaxies
Advisors: Sandra Faber, David Koo

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

PUBLICATIONS

W. Wang, S. A. Kassin, S. M. Faber, D. C. Koo et al. (2021), 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):
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):
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 publication list (9 papers in total as of Oct. 2021).

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

Talks

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 work shop (contributed talk), Santa Cruz, CA, 2018
AAS Meeting 231 (contributed talk), Washington DC, 2018
Conference "Plumbing Star-Formation Rates in the Age of JWST " (contributed talk), Texas A&M University, TX, 2017
Conference "Dusting the Universe" (contributed talk), University of Arizona, AZ, 2018
JHU/STScI Galaxy Journal Club, Baltimore, MD, 2017
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.

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

Mentorship

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

Outreach Activities

Member of the Astro Scholars program since 2021
An annual week-long mini-course about astrophysics and computer programming for undergraduates from under-represented backgrounds; monthly meetings with the students over Zoom during the rest of the year

Member of the Physics and Astronomy Graduate Students (PAGS) Outreach Team, Johns Hopkins University, 2017-2019
Regularly support student visits from Baltimore local primary/middle schools

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

Service

Referee of The Astrophysical Journal (since 2018)