Weichen Wang (Updated August, 2021)

Curriculum Vitae

Contact Department of Physics and Astronomy, E-mail: wcwang@jhu.edu

Information Johns Hopkins University https://weichenstars.github.io

Bloomberg Center for Physics and Astronomy,

3400 N. Charles Street,

Baltimore, MD 21218, United States

EDUCATION Johns Hopkins University, Maryland, 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 Advisors: Shude Mao, Sandra Faber

RESEARCH EXPERIENCE Johns Hopkins University, Baltimore, MD, United States

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

9/2016-now

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, David C. Koo et al., 2021 to be submitted: The Baltimore Oriole's Nest: Outflows from 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.

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 The IAU travel grant, 2019.

AWARDS

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

Proposals

OBSERVATIONS AND 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, Nov. 2016

MENTORSHIP

Ying Qin, JHU undergraduate in physics major, since 2021: Studying the Mq 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)