Curriculum Vitae Weichen Wang

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Information University of Milano-Bicocca https://weichenstars.github.io

Ex U2, Piazza della Scienza, 3, Milan 20126, Italy

EDUCATION Johns Hopkins University, Baltimore MD, United States

Department of Physics and Astronomy, 9/2016 - 12/2022

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 University of Milano-Bicocca, Milan MI, Italy 12/2022 - now

EXPERIENCE Department of Physics, Postdoc Researcher (European Research Council funded)

Research topics: the circumgalactic medium and cosmic web

Advisor: Sebastiano Cantalupo

Johns Hopkins University, Baltimore MD, United States

9/2016-12/2022

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

2/2020-3/2021; 7-9/2015 University of California, Santa Cruz CA, United States

Department of Astronomy, Visiting Student

Research topics: galactic winds at $z \sim 1$; spatially resolved star formation and dust atten-

uation 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, 930, 146 (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-\beta 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 (15 in total as of 12/2022, > 300 citations).

OBSERVATIONS AND JWST Cycle-1 Program (Co.I. with major contribution; P.I.: Susan Kassin):

Proposals A Pathfinder for JWST Spectroscopy: Deep High Spectral Resolution Maps of Galaxies over 1 < z < 6, 74.3 hours, scheduled for 2023

JWST Cycle-1 Program (joined in 2022 with major contributions anticipated; P.I.:

Sebastiano Cantalupo): Unraveling the Knots of Gaseous Cosmic Web Filaments at $z\sim3$ through H-alpha Emission Observations, 24.4 hours, scheduled for 2023

JWST Cycle-1 Program (P.I.: Steven Finkelstein): The Cosmic Evolution Early Release Science (CEERS) Survey, 2022-2023

HST Cycle-30 Program (P.I.: Sebastiano Cantalupo): Resolving a Massive Node of the Cosmic Web at z=3, 22 orbits, scheduled for 2023

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

ALMA Cycle-7 Program (P.I.), 14.7 hours, 2021: 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

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

Mentorship

Ying Qin, JHU undergraduate in physics major, since 2021:

Studying the MqII emission and leaking ionizing photons from low-mass galaxies at $z \sim 1$.

M. Francesca Uboldi, Bicocca undergraduate in physics major, since 2023:

Exploring the relations between galaxy colors and morphology using the JWST medium-band

imaging data.

Teaching

Laboratory of Data Analysis for Master Students in Astrophysics

EXPERIENCE University of Milano-Bicocca, Spring 2023

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

ACADEMIC SERVICE Referee for The Astrophysical Journal, Astronomy and Astrophysics

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 \mathcal{E} 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.