Sijie Yu

Phone: (+1) 949-771-6358 | Email: sijiey3@uci.edu | Website: http://sijiey3.github.io

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE **Irvine, CA**
- Ph.D., Physics and Astronomy, Advisor: James S. Bullock *Sept 2016 - present*

NANJING UNIVERSITY **Nanjing, China**
- Bachelor, Astronomy, GPA: 4.39/5.0 *Sept 2012 - July 2016*

RESEARCH EXPERIENCES

UNIVERSITY OF CALIFORNIA, IRVINE **Irvine, CA**
Graduate Student Researcher *Jan 2020 - present*
Project Title: **The bursty origin of the Milky Way thick disc**

- *Use cosmological hydrodynamic simulations FIRE-II to study the formation and evolution of Milky Way-mass galaxies discs.*

Graduate Student Researcher *May 2017 – Dec 2019*
Project Title: **Stars made in outflows may populate the stellar halo of the Milky Way**

- *Use cosmological hydrodynamic simulations FIRE-II to study the formation and evolution of Milky Way-mass galaxies, especially the stellar halo.*

UNIVERSITY OF WISCONSIN-MADISON **Madison, WI**
Research Experiences for Undergraduates *May 2015 - Aug 2015*
Project Title: **Emission Line Analysis of An Interacting Galaxy Pair J0754+1648**

- *Participated in the new IFU commissioning. Acquired proficiency in IFU data reduction using IRAF. Studied the relationship between the post-starburst region of the object galaxy and the possible AGN inside that galaxy. Personal website: http://www.astro.wisc.edu/~sijieyu/index.html*

NANJING UNIVERSITY **Nanjing, China**
National Innovation Program for Undergraduates *April 2014 - present*
Project Title: **Research on Astronomical Phenomena Induced by the Collapse of Hypermassive Black Holes**

- *Learned of several basic physics mechanism relevant to the collapse of hypermassive black holes, such as magneto rotational instability (MRI). Evaluated the several most frequently used models applied to the numerical simulation of the process.*

Research Training for Undergraduates *Nov 2014 - May 2015*
Project Title: **Analysis of the Transit Timing Variation Signals of Exoplanets**

- *Reduced data collected by Weihai Observatory using Matlab and IDL. Extracted light curves of exoplanets and fitted different parameters.*

PUBLICATIONS

- ***Yu, S.***, Bullock, J. S., Klein, C., Stern, J., Wetzel, A., Ma, X., Moreno, J., Hafen, Z., Gurvich, A., Hopkins, P. F., Kereš, D., Faucher-Giguère, C.-A., Feldmann, R., Quataert, E. 2020, "The bursty origin of the Milky Way thick disc", submitted to MNRAS, arXiv: 2103.03888
- ***Yu, S.***, Bullock, J. S., Wetzel, A., Sanderson, R. E., Graus, A. S., Boylan-Kolchin, M., Nienrenberg, A. M., Grudić, M. Y., Hopkins, P. F., Kereš, D., Faucher-Giguère, C.-A. 2020, "Stars made in outflows may populate the stellar halo of the Milky Way", MNRAS, 494, 1539.

INVITED AND CONTRIBUTED TALKS

STARS MADE IN OUTFLOWS MAY POPULATE THE OUTER STELLAR HALO

- *Dynamical Reconstruction of Galaxies, Lorentz Center, the Netherlands* — *Feb, 2020*
- *Galaxy Formation and Revolution in Southern California 2019, Irvine, CA* — *Aug, 2019*
- *Santa Cruz Galaxy Workshop 2019, Santa Cruz, CA* — *Aug, 2019*
- *IAUS 353: Galactic Dynamics in the Era of Large Surveys, Shanghai, China* — *July, 2019*
- *Dynamical Models for Stars and Gas in Galaxies in the Gaia Era, Santa Barbara, CA* — *March, 2019*

A SIGNIFICANT POPULATION OF KICKED-OUT STARS IN THE DISTANT GALACTIC HALO

- *Galaxy Formation and Revolution in Southern California 2018, Pasadena, CA* — *Aug, 2018*
- *Santa Cruz Galaxy Workshop 2018, Santa Cruz, CA* — *Aug, 2018*

HONORS AND AWARDS

Chancellor's Fellowship, *University* of California, Irvine — *Sept 2016 – July 2018*
The Elite Program Fellowship, *Nanjing University* — *Sept 2012 – July 2015*
Outstanding Student Leaders of the School, *Nanjing University* — *Dec 2014*
The National People's Scholarship, *Nanjing University* — *Nov 2014, Nov 2013*
The National Astronomical Observatory's Scholarship, *National Astronomical Observatory* — *Dec 2013*

OUTREACH

ASTRONOMY OUTREACH PROGRAM
Physics and Astronomy, University of California, Irvine — *June 2017 – June 2018*

ADDITIONAL SKILLS

- **Software:** IRAF, Matlab, IDL, SAOImage DS9, Eclipse
- **Programming Languages:** Python, C, C++, Java, HTML
- **Languages:** Mandarin (native), English (**TOEFL iBT 115**: R30 L29 S28 W28)