

Stanford



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Ph.D. Student in Physics, admitted Autumn 2019

Curriculum Vitae available Online

Publications

PUBLICATIONS

- **The DESI One-Percent Survey: exploring a generalized SHAM for multiple tracers with the UNIT simulation** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Yu, J., Zhao, C., Gonzalez-Perez, V., Chuang, C., Brodzeller, A., de Mattia, A., Kneib, J., Krolewski, A., Rocher, A., Ross, A., Wang, Y., Yuan, S., Zhang, et al 2024; 527 (3): 6950-6969
- **X-ray scaling relations of early-type galaxies in IllustrisTNG and a new way of identifying backsplash objects** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Wang, Y., Vogelsberger, M., Kim, D., Borrow, J., Smith, A., Hernquist, L., Lin, W.
2023; 527 (3): 6763-6778
- **Symphony: Cosmological Zoom-in Simulation Suites over Four Decades of Host Halo Mass** *ASTROPHYSICAL JOURNAL*
Nadler, E. O., Mansfield, P., Wang, Y., Du, X., Adhikari, S., Banerjee, A., Benson, A., Darragh-Ford, E., Mao, Y., Wagner-Carena, S., Wechsler, R. H., Wu, H.
2023; 945 (2)
- **Baryonic Effects on Lagrangian Clustering and Angular Momentum Reconstruction** *ASTROPHYSICAL JOURNAL*
Sheng, M., Yu, H., Li, S., Liao, S., Du, M., Wang, Y., Wang, P., Xu, K., Genel, S., Irodou, D.
2023; 943 (2)
- **Detection of spatial clustering in the 1000 richest SDSS DR8 redMaPPer clusters with nearest neighbor distributions** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Wang, Y., Banerjee, A., Abel, T.
2022; 514 (3): 3828-3843
- **Early-type galaxy density profiles from IllustrisTNG - III. Effects on outer kinematic structure** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Wang, Y., Mao, S., Vogelsberger, M., Springel, V., Hernquist, L., Wechsler, R. H.
2022; 513 (4): 6134-6151
- **Quenched, bulge-dominated, but dynamically cold galaxies in IllustrisTNG and their real-world counterparts** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Lu, S., Xu, D., Wang, S., Wang, Y., Mao, S., Xia, X., Vogelsberger, M., Hernquist, L.
2022; 509 (4): 5062-5074
- **UniverseMachine: Predicting Galaxy Star Formation over Seven Decades of Halo Mass with Zoom-in Simulations** *ASTROPHYSICAL JOURNAL*
Wang, Y., Nadler, E. O., Mao, Y., Adhikari, S., Wechsler, R. H., Behroozi, P.
2021; 915 (2)
- **Hot and counter-rotating star-forming disc galaxies in IllustrisTNG and their real-world counterparts** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Lu, S., Xu, D., Wang, Y., Chen, Y., Zhu, L., Mao, S., Springel, V., Wang, J., Vogelsberger, M., Hernquist, L.
2021; 503 (1): 726-742

● **Star Formation in Massive Galaxies at Redshift z similar to 0.5** *ASTROPHYSICAL JOURNAL*

Xu, K., Liu, C., Jing, Y., Wang, Y., Lu, S.
2020; 895 (2)

● **Redshift evolution of the Fundamental Plane relation in the IllustrisTNG simulation** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

Lu, S., Xu, D., Wang, Y., Mao, S., Ge, J., Springel, V., Wang, Y., Vogelsberger, M., Jill, N., Hernquist, L.
2020; 492 (4): 5930-5939

● **Early-type galaxy density profiles from IllustrisTNG - I. Galaxy correlations and the impact of baryons** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

Wang, Y., Vogelsberger, M., Xu, D., Mao, S., Springel, V., Li, H., Barnes, D., Hernquist, L., Pillepich, A., Marinacci, F., Pakmor, R., Weinberger, R., Torrey, et al
2020; 491 (4): 5188-5215

● **SDSS-IV MaNGA: the inner density slopes of nearby galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

Li, R., Li, H., Shao, S., Lu, S., Zhu, K., Wang, C., Gao, L., Mao, S., Dutton, A. A., Ge, J., Wang, Y., Leauthaud, A., Zheng, et al
2019; 490 (2): 2124-2138

● **Early-type galaxy density profiles from IllustrisTNG - II. Evolutionary trend of the total density profile** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

Wang, Y., Vogelsberger, M., Xu, D., Shen, X., Mao, S., Barnes, D., Li, H., Marinacci, F., Torrey, P., Springel, V., Hernquist, L.
2019; 490 (4): 5722-5738