

# LIST OF PUBLICATIONS

Song Huang

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## FIRST AUTHOR PUBLICATIONS

1. **Huang, S.**, Leauthaud, A., Hearin, A., Behroozi, P., Bradshaw, C., Ardila, F., Speagle, J., Tanneti, A., Greene, J., Bundy, K., Sifón, C., Bahcall, N., *MNRAS*, 492, 3685 (2020)  
*Weak Lensing Reveals a Tight Connection Between Dark Matter Halo Mass and the Distribution of Stellar Mass in Massive Galaxies*
2. **Huang, S.**, Leauthaud, A., Greene, J., Bundy, K., Lin, Y.-T., Tanaka, M., Mandelbaum, R., Miyazaki, S., & Komiyama, Y. *MNRAS*, 480, 521 (2018)  
*A Detection of the Environmental Dependence of the Sizes and Stellar Haloes of Massive Central Galaxies*
3. **Huang, S.**, Leauthaud, A., Greene, J., Bundy, K., Lin, Y.-T., Tanaka, M., Miyazaki, S., & Komiyama, Y. *MNRAS*, 475, 3348 (2018)  
*Individual Stellar Halos of Massive Galaxies Measured to 100 kpc at  $0.3 < z < 0.5$  using Hyper Suprime-Cam*
4. **Huang, S.**, Leauthaud, A., Murata, R., Bosch, J., Price, P., Lupton, R., Mandelbaum, R., Lackner, C., Bickerton, S., Miyazaki, S., Coupon, J., & Tanaka, M., *PASJ*, 70S, 6 (2018)  
*Characterization and Photometric Performance of the Hyper Suprime-Cam Software Pipeline*
5. **Huang, S.**, Ho, L. C., Peng, C. Y., Li, Z. -Y. & Barth, A. J, *ApJ*, 821, 114 (2016)  
*The Carnegie-Irvine Galaxy Survey. IV. A Method to Determine the Average Mass Ratio of Mergers That Built Massive Elliptical Galaxies*
6. **Huang, S.**, Ho, L. C., Peng, C. Y., Li, Z. -Y. & Barth, A. J, *ApJ*, 768, L28 (2013)  
*Fossil Evidence for the Two-Phase Formation of Elliptical Galaxies*
7. **Huang, S.**, Ho, L. C., Peng, C. Y., Li, Z. -Y. & Barth, A. J, *ApJ*, 766, 47 (2013)  
*The Carnegie-Irvine Galaxy Survey. III. The Three-Component Structure of Nearby Elliptical Galaxies*
8. **Huang, S.**, & Gu, Q. -S., *MNRAS*, 398, 1651 (2009)  
*Recent star-forming activity in local elliptical galaxies*

## NON-FIRST AUTHOR PUBLICATIONS

9. Ardila F., **Huang S.**, Leauthaud A., Diemer B., Pillepich A., Chowdhury R., Fiacconi D., et al., *MNRAS*, 500, 432. (2021)  
*Stellar and weak lensing profiles of massive galaxies in the Hyper-Suprime Cam survey and in hydrodynamic simulations*
10. Khakaj, E., Diemer, B., Leauthaud, A., Wasserman, Asher, **Huang, Song**, et al. *MNRAS*, 499, 3534. (2020)  
*How Accurately Can We Detect the Splashback Radius of Dark Matter Halos and its Correlation With Accretion Rate?*

11. Storey-Fisher, Kate, Huertas-Company, Marc, Ramachandra, Nesar; Lanusse, Francois, Leauthaud, Alexie, Luo, Yifei, **Huang, Song**. Accepted to the 2020 NeurIPS Machine Learning and the Physical Science Workshop.  
*Anomaly Detection in Astronomical Images with Generative Adversarial Networks*
12. Pan, Hsi-An; Lin, Lihwai, Hsieh, Bau-Ching, Michałowski, Michał J., Bothwell, Matthew S., **Huang, Song** et al. *ApJ*, 903, 16. (2020)  
*SDSS-IV MaNGA: The Nature of an Off-galaxy  $H\alpha$  Blob—A Multiwavelength View of Offset Cooling in a Merging Galaxy Group*
13. Somalwar, Jean J. and Greene, Jenny E. and Greco, Johnny P. and **Huang, Song** and Beaton, Rachael L. and Goulding, Andy D. and Lancaster, Lachlan *ApJ*, 902, 45. (2020)  
*Hyper Suprime-Cam Low Surface Brightness Galaxies. II. A Hubble Space Telescope Study of the Globular Cluster Systems of Ultradiffuse Galaxies in Groups*
14. Kado-Fong, Erin and Greene, Jenny E. and **Huang, Song** and Beaton, Rachael and Goulding, Andy D. and Komiyama, Yutaka *ApJ*, 900, 163. (2020)  
*Tracing the Intrinsic Shapes of Dwarf Galaxies Out to Four Effective Radii: Clues to Low-mass Stellar Halo Formation*
15. Bradshaw, Christopher., Leauthaud, Alexie., Hearin, Andrew., **Huang, Song** & Behroozi, Peter., *MNRAS*, 493, 1, 337-350 (2020)  
*Physical Correlations of the Scatter between Galaxy Mass, Stellar Content, and Halo Mass*
16. Aihara, H., [and 64 others, including **Huang, S.**], *PASJ*, 106A, (2019)  
*Second data release of the Hyper Suprime-Cam Subaru Strategic Program*
17. Speagle, Joshua S., Leauthaud, Alexie., **Huang, Song**., Bradshaw, Christopher P., Ardila, Felipe., Capak, Peter L., Eisenstein, Daniel J., Masters, Daniel C., Mandelbaum, Rachel., More, Surhud, Simet, Melanie, & Sifón, Cristóbal, *MNRAS*, 2579S, (2019)  
*Galaxy-Galaxy Lensing in HSC: Validation Tests and the Impact of Heterogeneous Spectroscopic Training Sets*
18. Ito, Kei, Kashikawa, Nobunari, Toshikawa, Jun, Overzier, Roderik, Tanaka, Masayuki, Kubo, Mariko, Shibuya, Takatoshi, Ishikawa, Shogo, Onoue, Masafusa, Uchiyama, Hisakazu, Liang, Yongming, Higuchi, Ryo, Martin, Crystal L., Lee, Chien-Hsiu, Komiyama, Yutaka & **Huang, Song**, *ApJ*, 878, 68L, (2019)  
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19. Greco, J. P., Goulding, A. D., Greene, J. E., Strauss, M. A., **Huang, S.**, Kim, J. H., Komiyama, Y., *ApJ*, 866, 112, (2018)  
*A Study of Two Diffuse Dwarf Galaxies in the Field*
20. Sun, A.-L., Greene, J. E., Zakamska, N. L., Goulding, A. D., Strauss, M. A., **Huang, S.**, Johnson, S. D., Kawaguchi, T., Matsuoka, Y., Marsteller, A. A., Nagao, T., Toba, Y., *MNRAS*, 480, 2302, (2018)  
*Imaging extended emission-line regions of obscured AGN with the Subaru Hyper Suprime-Cam Survey*
21. Kado-Fong, E., Greene, J. E., Hendel, D., Price-Whelan, A. M., Greco, J. P., Goulding, A. D., **Huang, S.**, Johnston, K. V., Komiyama, Y., Lee, C.-H., Lust, N. B., Strauss, M. A.,

- Tanaka, M., *ApJ*, 866, 103, (2018)  
*Tidal Features at  $0.05 < z < 0.45$  in the Hyper Suprime-Cam Subaru Strategic Program: Properties and Formation Channels*
22. Greco, J. P., Greene, J. E., Strauss, M. A., MacArthur, L. A., Flowers, X., Goulding, A. D., **Huang, S.**, Kim, J. H., Komiyama, Y., Leauthaud, A., Leisman, L., Lupton, R. H., Sifón, C., Wang, S.-Y., *ApJ*, 857, 104 (2018)  
*Illuminating Low-Surface-Brightness Galaxies with the Hyper Suprime-Cam Survey*
  23. Nishizawa, A. J., [and 17 others, including **Huang, S.**], *PASJ*, 70S, 24, (2018)  
*First results on the cluster galaxy population from the Subaru Hyper Suprime-Cam survey. II. Faint end color-magnitude diagrams and radial profiles of red and blue galaxies at  $0.1 < z < 1.1$*
  24. Medezinski, E., [and 15 others, including **Huang, S.**], *PASJ*, 70, 30, (2018)  
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  25. Mandelbaum, R., [and 30 others, including **Huang, S.**], *PASJ*, 70S, 25 (2018)  
*The first-year shear catalog of the Subaru Hyper Suprime-Cam SSP Survey*
  26. Bosch, J., [and 34 others, including **Huang, S.**], *PASJ*, 70, 5, (2018)  
*The Hyper Suprime-Cam Software Pipeline*
  27. Greco, J. P., Greene, J. E., Price-Whelan, A. M., Leauthaud, A., **Huang, S.**, [and 8 others], *PASJ*, 70S, 19, (2018)  
*Sumo Puff: Tidal Debris or Disturbed Ultra-Diffuse Galaxy?*
  28. Aihara, H., [and 142 others, including **Huang, S.**], *PASJ*, 70, 4, (2018)  
*The Hyper Suprime-Cam SSP Survey: Overview and Survey Design*
  29. Aihara, H., [and 108 others, including **Huang, S.**], *PASJ*, 70, 8, (2018)  
*First Data Release of the Hyper Suprime-Cam Subaru Strategic Program*
  30. Lin, Y.-T., Hsieh, B.-C., Lin, S.-C., Oguri, M., Chen, K.-F., Tanaka, M., Chiu, I., **Huang, S.**, Kodama, T., Leauthaud, A., More, S., Nishizawa, A. J., Bundy, K., Lin, L., Miyazaki, S., *ApJ*, 851, 139 (2017)  
*First results on the cluster galaxy population from the Subaru Hyper Suprime-Cam survey. III. Brightest cluster galaxies, stellar mass distribution, and active galaxies*
  31. Lin, L., Lin, J.-H., Hsu, C.-H., Fu, H., **Huang, S.**, [and 29 others], *ApJ*, 837, 32 (2017)  
*SDSS IV MaNGA: Discovery of an  $H_\alpha$  Blob Associated with a Dry Galaxy Pair Ejected Gas or a “Dark” Galaxy Candidate?*
  32. Cheung, E., Stark, D. V., **Huang, S.**, [and 24 others], *ApJ*, 832, 182 (2016)  
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  33. Jin, Y., Chen, Y., Shi, Y., Tremonti, C. A., Bershad, M. A., Merrifield, M., Emsellem, E., Fu, H., Wake, D., Bundy, K., Lin, L., Argudo-Fernandez, M., **Huang, S.**, [and 20 others], *MNRAS*, 463, 913 (2016)  
*SDSS-IV MaNGA: properties of galaxies with kinematically decoupled stellar and gaseous components*
  34. Chen, Y.-M., Shi, Y., Tremonti, C. A., Bershad, M., Merrifield, M., Emsellem, E., Jin, Y.-F., **Huang, S.**, [and 24 others], *Nature Communication*, 713269 (2016)

*The growth of the central region by acquisition of counterrotating gas in star-forming galaxies*

35. Leauthaud, A., Bundy, K., Saito, S., Tinker, J., Maraston, C., Tojeiro, R., **Huang, S.**, Brownstein, J. R., Schneider, D. P., & Thomas, D., *MNRAS*, 457, 4021 (2016)  
*The Stripe 82 Massive Galaxy Project - II. Stellar mass completeness of spectroscopic galaxy samples from the Baryon Oscillation Spectroscopic Survey*
36. Davari, R., Ho, L. C., Peng, C. Y. & **Huang, S.**, *ApJ*, 787, 69 (2014)  
*How Robust are the Size Measurements of High-redshift Compact Galaxies?*
37. Jin, S. -W., Gu, Q. -S, **Huang, S.**, Shi, Y., & Feng, L. -L, *ApJ*, 787, 63 (2014)  
*Color-Magnitude Distribution of Face-on nearby Galaxies in Sloan Digital Sky Survey DR7*
38. Gu, M., Ho, L. C., Peng, C. Y. & **Huang, S.**, *ApJ*, 773, 34 (2013)  
*A Novel Approach to Constrain the Mass Ratio of Minor Mergers in Elliptical Galaxies: Application to NGC 4889, the Brightest Cluster Galaxy in Coma*
39. Jiang, F. -Z., **Huang, S.** & Gu, Q. -S., *RAA*, 11, 309 (2011)  
*Surface photometry and radial color gradients of nearby luminous early-type galaxies in SDSS Stripe 82*
40. Tang, B. -T., Gu, Q. -S. & **Huang, S.**, *RAA*, 9, 1215 (2009)  
*Stellar ages and metallicities of nearby elliptical galaxies*

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- Cannarozzo, Carlo and Nipoti, Carlo and Sonnenfeld, Alessandro and Leauthaud, Alexie and **Huang, Song** and Diemer, Benedikt and Oyarzún, Grecco, 2020, Proceedings of IAU Symposium 359 *The merger-driven evolution of massive early-type galaxies*
- **Huang, S.**, & HSC Survey Collaboration 2017, American Astronomical Society Meeting Abstracts, 229, #226.07 *Environment and Structure of Massive Central Galaxies through the Eye of Hyper Suprime-Cam*
- **Huang, S.**, Ho, L. C., Peng, C. Y., Li, Z. Y., & Barth, A. J. 2012, American Astronomical Society Meeting Abstracts, 219, #102.07  
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- Davari, R., Ho, L. C., Peng, C. Y., & **Huang, S.** 2013, American Astronomical Society Meeting Abstracts, 221, #147.37  
*Are The "Red Nuggets" Really Compact?*