

## 曹晨 Chen Cao

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### TEACHING EXPERIENCE

<Introduction to astronomy>, <Observational astrophysics>, <Galactic astronomy>, <The mystery of stars and universe>, <Amateur astronomical observation & photography>

### RESEARCH INTERESTS

Observational astrophysics, Multi-wavelength (optical, infrared, radio) observational studies on galaxy evolution, Transit and RV detections of extrasolar planets, Astronomical outreach and education

### EDUCATION BACKGROUND

2003.9 ~ 2008.7    PhD, National Astronomical Observatories, CAS, China  
1999.9 ~ 2003.7    BSc, Nankai University, China

### EMPLOYMENT HISTORY

2015.9 ~    Associate Professor, School of Space Science and Physics, Shandong University, Weihai  
2008.7 ~ 2015.9    Lecturer, School of Space Science and Physics, Shandong University, Weihai

### RESEARCH VISITS

2013.2 ~ 2014.2    Visiting Scholar, IPAC, Caltech, US.  
2008.7 ~ 2008.8    Visiting Scholar, Harvard/CfA, US.

**SELECTED PUBLICATIONS (NASA ADS [link](#); Researchid [link](#); Google Scholar: [link](#)):**

List of Publications

- [1] Herschel Observations of Major Merger Pairs at  $z = 0$ : Dust Mass and Star Formation  
**Cao, Chen**; Xu, Cong Kevin; Domingue, Donovan, et al. The Astrophysical Journal Supplement Series, Volume 222, Issue 2, article id. 16, 22 pp. (2016).
- [2] Mid-Infrared Spectroscopic Properties of Ultra-Luminous Infrared Quasars  
**Cao, C.**, Xia, X.-Y., Wu, H., Mao, S., Hao, C.-N., & Deng, Z.-G. Monthly Notices of the Royal Astronomical Society, Volume 390, Issue 1, pp. 336-348, 2008.
- [3] Multiwavelength Study of Young Massive Star Clusters in the Interacting Galaxy Arp 24  
**Cao, C.**, & Wu, H. Astronomical Journal, Volume 133, Issue 4, pp. 1710-1721, 2007.
- [4] Large Misalignment between Stellar Bar and Dust Pattern in NGC 3488 Revealed by Spitzer and SDSS  
**Cao, C.**, Wu, H., Wang, Z., Ho, L. C., Huang, J.-S., & Deng, Z.-G. New Astronomy, Volume 13, Issue 1, pp. 16-23, 2008.
- [5] A Catalog of Luminous Infrared Galaxies in the IRAS Survey and the Second Data Release of the SDSS  
**Cao, C.**, Wu, H., Wang, J.-L., Hao, C.-N., Deng, Z.-G., Xia, X.-Y., & Zou, Z.-L. Chinese Journal of Astronomy and Astrophysics, Volume 6, Issue 2, pp. 197-209, 2006.
- [6] Applying the Support Vector Machine Method to Matching IRAS and SDSS Catalogues  
**Cao, C.** Data Science Journal Supplement, Volume 6, pp. 756-759, 2007.
- [7] Star Formation Properties in Barred Galaxies (SFB).I. UV-to-Infrared Imaging & Spectroscopic Studies on NGC 7479  
Zhou, Z.-M., **Cao, C.**, Meng, X.-M., Wu, H. Astronomical Journal, Volume 142, Issue 2, pp. 38- , 2011.
- [8] Star Formation Properties in Barred Galaxies (SFB).II. NGC 2903 and NGC 7080  
Zhou, Z.-M., **Cao, C.**, Wu, H. Research in Astronomy and Astrophysics, Volume 12, Issue 3, pp. 235-248, 2012.
- [9] PAH and Mid-Infrared Luminosities as Measures of Star Formation Rate in Spitzer First Look Survey Galaxies  
Wu, H., Cao, C., Hao, C.-N., Liu, F.-S., Wang, J.-L., Xia, X.-Y., Deng, Z.-G., Young, C. K.-S. Astrophysical Journal Letter, Volume 632, Issue 2, pp. 79-82, 2005. (ADS ; arXiv)
- [10] IRAS F21013–0739: a possible evolutionary successor of an ultraluminous infrared galaxy  
Meng, X.-M., Wu, H., Cao, C. Research in Astronomy and Astrophysics, Volume 11, No 4, pp. 419-433, 2011. (ADS)
- [11] Effects of Metallicity and AGN Activity on the Mid-Infrared Dust Emission of Galaxies  
Wu, H., Zhu, Y.-N., Cao, C., & Qin, B. Astrophysical Journal, Volume 668, Issue 1, pp. 87-93, 2007. (ADS ; arXiv)
- [12] The Debris Disk Candidates in Spitzer SWIRE Fields  
Wu, H., Wu, C.-J., Cao, C., Wolf, S., & Hu, J.-Y. Research in Astronomy and Astrophysics, Volume 12, Issue 5, pp. 513-528 (2012). ( ; arXiv)
- [13] Morphological Dependence of MIR Properties on SDSS Galaxies in the Spitzer SWIRE Survey  
Li, H.-N., Wu, H., Cao, C., & Zhu, Y.-N.  
Astronomical Journal, Volume 134, Issue 4, pp. 1315-1329, 2007. (ADS ; arXiv)
- [14] Correlations between MIR, FIR, Ha, and FUV Luminosities for Spitzer SWIRE-field Galaxies  
Zhu, Y.-N., Wu, H., Cao, C., & Li, H.-N. Astrophysical Journal, Volume 686, Issue 1, pp. 155-171, 2008. (ADS ; arXiv)
- [15] The Mid-to-Far infrared Spectral Energy Distribution of galaxies in Spitzer First Look Survey Field  
Wen, X.-Q., Wu, H., Cao, C., & Xia, X.-Y. Chinese Journal of Astronomy and Astrophysics, Volume 7, Issue 2, pp. 187-198, 2007. (ADS ; arXiv)
- [16] Morphology of Luminous Infrared Galaxies in the Local Universe  
Wang, J.-L., Xia, X.-Y., Mao, S., Cao, C., Wu, H., & Deng, Z.-G. Astrophysical Journal, Volume 649, Issue 2, pp. 722-729, 2006. (ADS ; arXiv)

- [17] Stellar mass estimation based on IRAC photometry for Spitzer SWIRE-field galaxies  
Zhu, Y.-N., Wu, H., Li, H.-N., & Cao, C. *Research in Astronomy and Astrophysics*, Volume 10, Issue 4, pp. 329-347, 2010. (ADS ; arXiv)
- [18] IRAS F13308+5946: A Possible Transition Phase From Type I ULIRG To Optical Quasar  
Meng, X.-M., Wu, H., Gu, Q.-S., Wang, J., & **Cao, C.** *Astrophysical Journal*, Volume 718, Issue 2, pp. 928-938, 2010. (ADS ; arXiv)
- [19] The Star Formation Reference Survey. I. Survey Description and Basic Data  
Ashby, M.L.N., ..., **Cao, C.**, et al. *Publications of the Astronomical Society of the Pacific*, Volume 123, issue 907, pp.1011-1029, 2011 (ADS ; arXiv)
- [20] A giant outburst two years before the core-collapse of a massive star  
Pastorello, A., ... , **Cao, C.**, et al. *Nature*, Volume 447, Issue 7146, pp. 829-832, 2007. (ADS ; arXiv)
- [21] Observation and Research of the Transits of Extrasolar Planets  
Zhang, Ji-Cheng; **Cao, Chen**; Song, Nan; Wang, Fei-Ge; Zhang, Xiao-Tong *Chinese Astronomy and Astrophysics*, Volume 35, Issue 4, p. 409-420. 2011.
- [22] Silicon Abundances in nearby Stars from the Si I Infrared Lines  
Shi, J. R.; Takada-Hidai, M.; Takeda, Y.; Tan, K. F.; Hu, S. M.; Zhao, G.; **Cao, C.** *The Astrophysical Journal*, Volume 755, Issue 1, article id. 36 (2012).