

Yang Huang

Curriculum Vitae

PERSONAL DETAILS

Birth Date May 29, 1989
Birth Place Wuwei, Anhui, China
Address 20A Datun Road, Chaoyang District, Beijing, 100101, China
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EDUCATION

Ph.D. in Astrophysics 2011-2016
Peking University, China

B.S. in Applied Physics 2007-2011
Anhui University, China

B.A. in English 2009-2011
Anhui University, China

EMPLOYMENT

Associate Professor 2023-present
School of Astronomy and Space Science, University of the Chinese Academy of Sciences, China

Visiting Scholar 2022-2023
National Astronomical Observatories, Chinese Academy of Sciences, China

Associate Director 2020-2022
SWIFAR, Yunnan University, China

Associate Professor 2018-2022
SWIFAR, Yunnan University, China

Postdoctoral Researcher & LAMOST Fellow 2016-2018
Peking University, China
The LAMOST FELLOWSHIP is supported by Special fund for Advanced Users, budgeted and administrated by Center for Astronomical Mega-Science, Chinese Academy of Sciences (CAMS).

RESEARCH INTERESTS

- Large-scale spectroscopic & photometric surveys
- Galactic dynamics and Galactic archaeology
- Stellar astrophysics
- Compact objects and related physics
- Active galactic nucleus (AGN) & merging galaxies

SELECTED AWARDS & HONORS

2025	Xiaomi Young Scholar Award, UCAS
2024	Promising scientist Award of 2024 DAMO Academy Young Fellow
2024	“Measurements of the Galactic mass” was awarded the 2023 UCAS Top 10 News
2022	Outstanding Reviewer for RAA in 2021
2020	International Astronomical Union Junior Member
2019	Chinese Astronomical Society Member
2019	Young Talents of the “Thousand Talents Project” of Yunnan Province
2017	International Astronomical Union PhD Prize
2012-2016	Presidential Fellowship, Peking University (RMB: 51,000 yuan/year)
2014-2015	National Scholarship for Ph.D. Student (Chinese top scholarship)
2013-2014	Leo KoGuan Scholarship, Peking University
2013	Top 10 progress of Chinese astronomy 2012, co-I

GRANTS

2025-2027	Natural Science Foundation of China, Excellent Young Scientists Fund, 2M RMB
2023-2028	National Key R&D Program, 3M RMB (PI of sub-project)
2023-2028	Strategic Priority Research Program, CAS, 3M RMB (PI of sub-project)
2024-2027	CAS Talent Program (Class-B), 4M RMB
2021-2022	Cultivation Project for LAMOST Scientific Payoff and Research Achievement of CAMS-CAS, 93k RMB
2020-2022	Natural Science Foundation of China Youth Fund, 300k RMB
2019-2024	National Key R&D Program of China, core member
2019-2023	Natural Science Foundation of China Key Program, core member
2019-2020	Cultivation Project for LAMOST Scientific Payoff and Research Achievement of CAMS-CAS, 50k RMB
2018-2022	Yunnan University Grant, 1.5M RMB
2017-2019	General Program, China Postdoctoral Science Foundation, 50k RMB
2016-2019	LAMOST Fellowship, Chinese Academy of Sciences, 150k RMB

SERVICE

2020-	Referee for RAA, AAS, PASP and A&A journals
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VISITING EXPERIENCE

- Instituto de Astrofísica de Canarias, 2025.11.15-2025.11.23, hosted by Dr. David Aguado
- Instituto de Astrofísica de Canarias, 2025.06.09-2025.06.13, hosted by Dr. David Aguado
- University of Notre Dame, 2024.05.07-2024.05.19, hosted by Prof. Timothy Beers
- Peking University, 2022.07.01-2022.07.16, hosted by Prof. Huawei Zhang
- NAOC, 2022.05-2023.05, hosted by Prof. Jifeng Liu
- Peking University, 2021.10.19-2021.10.22, hosted by Prof. Subo Dong
- Xiamen University, 2021.05.12-2021.05.14, hosted by Prof. Weimin Gu
- Korea Astronomy and Space Science Institute, 2019.10.30-2019.11.01, hosted by Prof. Chung-uk Lee
- Oxford University, 2019.07.25-2019.08.10, hosted by Prof. James Binney
- Anhui University, 2018.11.16-2018.11.17, hosted by Prof. Liang Lv and Prof. Gang Li
- Beijing Normal University, 2018.11.11-2018.11.15, hosted by Dr. Haibo Yuan
- Macquarie University, 2018.03.23-2018.03.30, Visiting Scholar, hosted by Dr. Chengyuan Li
- China Three Gorges University, 2018.01.14-2018.01.16, hosted by Dr. Gaochao Liu
- Max Planck Max Planck Institute of Solar Research, 2017.10.01-2017.10.07, hosted by Dr. Saskia Hekker & Alexey Mints
- Oxford University, 2017.09.01-2017.09.30, hosted by Prof. James Binney
- Hebei Normal University, 2017.03.09-2017.03.10, hosted by Dr. Minzhi Kong & Prof. Ji Li

COLLABORATION

- Southern Photometric Local Universe Survey (SPLUS): External member (2020–)
- Javalambre Physics of the Accelerating Universe Astrophysical Survey (J-PAS): Member (2019–)

PUBLICATIONS

First-author OR corresponding-author (with *) papers: (See my all publications in: [My ADS Library](#), H-index = 43)

80. Ruifeng Shi, **Yang Huang*** et al., [Filter Design for Estimating the Stellar Metallicity of Metal-poor Stars from Gaia XP Spectra](#), AJ, 171, 353, 2026
79. Shunhong Deng, **Yang Huang*** et al., [An Old, Low-mass, Metal-poor Hypervelocity Star Candidate Consistent with a Galactic Center Origin](#), ApJL, 1003, 9, 2026

78. Shunxuan He & **Yang Huang***, [Three-dimensional Reddening Maps of the Magellanic Clouds Constructed by RR Lyrae Stars](#), *AJ*, 171, 310, 2026
77. Hao Wu, **Yang Huang*** Huawei Zhang* et al., [The Fate of the Milky Way–Andromeda System: To Merge or Not?](#), *ApJL*, 1001, 19, 2026
76. **Yang Huang** et al., [S-PLUS: Beyond Spectroscopy. IV. Stellar Parameters and Elemental-abundance Ratios for Six Million Stars from DR4 and First Results for the Magellanic Clouds](#), *ApJ*, 1000, 263, 2026
75. Ao Chen, Juntao Shen*, Chun Wang*, **Yang Huang***, [Revisiting the radial metallicity gradient-age relation in the Milky Way’s thin and thick discs](#), *MNRAS*, 546, 035, 2026
74. Shenglan Sun, **Yang Huang***, Fangzhou Jiang*, Huawei Zhang* et al., [A 3D Chemo-dynamical Census of Inner-Galaxy Metal-poor Giants to \$\[Fe/H\] \sim -3.5\$](#) , *ApJL*, 1000, 27, 2026
73. Qikang Feng, **Yang Huang***, Huawei Zhang, Jifeng Li, [The rotation curve of the Milky Way measured by classical Cepheids from Gaia DR3](#), *MNRAS*, 546, 011, 2026
72. Xiaosheng Zhao, **Yang Huang***, Guirong Xue, et al., [SpecCLIP: Aligning and Translating Spectroscopic Measurements for Stars](#), *ApJ*, 998, 189, 2026
71. Kai Xiao*, **Yang Huang***, Haibo Yuan*, ..., Jifeng Liu*, [A Large and Precise All-Sky Photometric Standard Star Dataset Across More Than 200 Passbands](#), *Nature Scientific Data*, 13, 265, 2026
70. Xiaoxiong Zuo, Yihan Tao, **Yang Huang***, Zhixuan Kang, Huaxi Chen* et al., [FALCO: Foundation Model of Astronomical Light Curves for Time Domain Astronomy. Implementation and Applications on Kepler Data](#), *AJ*, 171, 10, 2026
69. Yanan Wang*, ..., Weihua Lei*, ..., **Yang Huang***, ..., Jifeng Liu* et al., [Detection of disk-jet coprecession in a tidal disruption event](#), *Science Advance*, 11, 9068, 2025
68. Haozhu Fu, **Yang Huang*** and Huawei Zhang* [Search for Distant Hypervelocity Star Candidates Using RR Lyrae Stars](#), *ApJ*, 994, 148, 2025
67. Hao Wu, **Yang Huang***, Huawei Zhang*, Qikang Feng et al. [Revisiting the proper motions of M31 and M33 using massive supergiant stars with Gaia DR3](#), *A&A*, 701, 265, 2025
66. Xiangyu Li, Huiling Chenng, **Yang Huang*** et al. [A Metallicity Catalog of Very Metal-poor Main-sequence Turn-off and Red Giant Stars from LAMOST DR10](#), *ApJS*, 279, 53, 2025
65. Chun Wang*, **Yang Huang*** et al. [A North–South Metallicity Asymmetry in the Outer Galactic Disk—Evidence for the Pericentric Passage of the Sagittarius Dwarf Galaxy](#), *ApJL*, 988, 70, 2025
64. Guozhen Hu, **Yang Huang***, Wenyuan Cui* et al. [Identification of BHB stars using Synthetic SkyMapper colors from Gaia XP spectra](#), *ApJS*, 278, 62, 2025
63. Yongkang Sun, **Yang Huang*** et al., [Systematic Search for Blue Hypervelocity Stars from LAMOST Survey](#), *ApJ*, 986, 22, 2025
62. Chuanjie Zheng, **Yang Huang***, Jifeng Liu* et al. [“Frog-eyes” in Astronomy: Monitoring Binary Radial Velocity Variations Through A Pair of Narrow-Band Filters](#), *SCPMA*, 7, 279511, 2025

61. Changqing Luo, ..., **Yang Huang***, Xuefei Chen*, Chao Liu*, [A born ultramassive white dwarf-hot subdwarf super-Chandrasekhar candidate](#), SCPMA, 6, 269511, 2025
60. Shunxuan He, **Yang Huang*** Xinyi Li*, ..., Gaochao Liu* et al., [Photometric-Metallicity and Distance Estimates for ~70,000 RR Lyrae Stars from the Zwicky Transient Facility](#), ApJS, 278, 2, 2025
59. **Yang Huang** and Timothy C. Beers, [Stellar Parameters for over 50 Million Stars from SMSS DR4 and Gaia DR3](#), RNAAS, 9, 74, 2025
58. Zhirui Li, Hongrui Gu, Yongkang Sun, **Yang Huang*** et al., [Searching for Kilonovae with the SiTian Prototype Telescope](#), RAA, 25, 4012, 2025
57. Hengheng Han, **Yang Huang*** et al., [The Mini-SiTian Array: White Paper](#), RAA, 25, 4009, 2025
56. Jinghang Shi, **Yang Huang*** et al., [The Mini-SiTian Array: Real-bogus Classification Using Deep Learning](#), RAA, 25, 4008, 2025
55. Hongrui Gu, **Yang Huang*** et al., [The Mini-SiTian Array: the Mini-SiTian Real-time Image Processing Pipeline \(STRIP\)](#), RAA, 25, 4007, 2025
54. Kai Xiao, Zhirui Li, **Yang Huang*** et al., [The Mini-SiTian Array: Imaging Processing Pipeline](#), RAA, 25, 4006, 2025
53. **Yang Huang** et al., [The Mini-SiTian Array: A Pathfinder for the SiTian Project](#), RAA, 25, 4001, 2025
52. Xiaolu Li, Kai Xiao*, **Yang Huang***, Haibo Yuan*, Yanke Tan* et al., [The S-PLUS Ultra-Short Survey: Photometric Re-calibration with the BEst STar Database](#), ApJS, 277, 26, 2025
51. Kai Xiao, **Yang Huang***, Haibo Yuan* et al., [Calibration of Complementary Metal-oxide-semiconductor Sensor-based Photometry to a Few-millimagnitude Precision: The Case of the Mini-SiTian Array](#), ApJL, 982, 27, 2025
50. Bowen Zhang, **Yang Huang***, et al., [Photometric Stellar Parameters for 195,478 Kepler Input Catalog \(KIC\) Stars](#), ApJS, 277, 6, 2025
49. Shenglan Sun, Fei Wang, Huawei Zhang*, Xiangxiang Xue*, **Yang Huang*** et al., [Identifying the Galactic Substructures in 5D Space Using All-sky RR Lyrae Stars in Gaia DR3](#), ApJ, 979, 213, 2025
48. **Yang Huang** et al., [A high-velocity star recently ejected by an intermediate-mass black hole in M15](#), National Science Review, 2, 12, 2025
47. Hao Wu, **Yang Huang***, et al., [The LAMOST Spectroscopic Survey of Supergiants in M31 and M33](#), RAA, 25, 5012, 2025
46. **Yang Huang** et al., [J-PLUS: Beyond Spectroscopy. III. Stellar Parameters and Elemental-abundance Ratios for Five Million Stars from DR3](#), ApJ, 974, 192, 2024
45. Chuanjie Zheng, **Yang Huang***, et al., [Direct Method to Compute Doppler Beaming Factors in Binary Stars](#), ApJ, 972, 151, 2024
44. **Yang Huang** et al., [A slightly oblate dark matter halo revealed by a retrograde precessing Galactic disk warp](#), Nature Astronomy, 8, 1294, 2024

43. Kai Xiao, Bowen Huang, **Yang Huang***, Haibo Yuan* et al., [Filter Design for Estimation of Stellar Metallicity: Insights from Experiments with Gaia XP Spectra](#), *ApJL*, 968, 24, 2024
42. Huiling Chen, **Yang Huang***, Wei Zhu et al., [The Kinematic and Chemical Properties of the Close-in Planet Host Star 8 UMi](#), *ApJL*, 966, 27, 2024
41. Ruifeng Shi, **Yang Huang***, Xinyi Li and Huawei Zhang, [On the Performances of Estimating Stellar Atmospheric Parameters from CSST Broad-band Photometry](#), *RAA*, 24, 5015, 2024
40. Kai Xiao, **Yang Huang***, Haibo Yuan* et al., [S-PLUS: Photometric Re-calibration with the Stellar Color Regression Method and an Improved Gaia XP Synthetic Photometry Method](#), *ApJS*, 271, 41, 2024
39. Weixiang Sun, **Yang Huang***, Han Shen et al., [Mapping the Galactic Disk with the LAMOST and Gaia Red Clump Sample. VIII. Mapping the Kinematics of the Galactic Disk Using Mono-age and Mono-abundance Stellar Populations](#), *ApJ*, 961, 141, 2024
38. Qingzheng Li, **Yang Huang***, Xiaobo Dong, [An update of the catalog of radial velocity standard stars from the APOGEE DR17](#), *RAA*, 23, 5026, 2023
37. **Yang Huang** et al., [Beyond spectroscopy. II. Stellar parameters for over twenty million stars in the northern sky from SAGES DR1 and Gaia DR3](#), *ApJ*, 961, 141, 2023
36. Shan Zhang, Gaochao Liu*, **Yang Huang*** et al., [Probing the Galactic halo with RR Lyrae stars - IV. On the Oosterhoff dichotomy of RR Lyrae stars](#), *MNRAS*, 525, 5915, 2023
35. Qing-zhen Li, **Yang Huang***, Xiao-bo Dong* et al., [On the Origins of Extreme Velocity Stars as Revealed by Large-scale Galactic Surveys](#), *AJ*, 166, 12, 2023
34. Chun Wang*, **Yang Huang***, Yutao Zhou, Huawei Zhang, [Precise Masses, Ages of 1.0 million RGB and RC stars observed by the LAMOST](#), *A&A*, 675, 26, 2023
33. Yuan Zhou, Xinyi Li, **Yang Huang***, Huawei Zhang, [The Circular Velocity Curve of the Milky Way from 5 to 25 kpc using luminous red giant branch star](#), *ApJ*, 946, 73, 2023
32. Xinyi Li, **Yang Huang*** et al., [Photometric metallicity and distance estimates for *sim* 136,000 RR Lyrae stars from Gaia DR3](#), *ApJ*, 944, 88, 2023
31. Gaochao Liu, **Yang Huang***, Sarah Ann Bird et al., [Probing the Galactic halo with RR Lyrae stars III. The chemical and kinematic properties of the stellar halo](#), *MNRAS*, 517, 2787, 2022
30. Chun Wang*, **Yang Huang***, Haibo Yuan, Huawei Zhang, Maosheng Xiang, Xiaowei Liu*, [The value-added catalogue for LAMOST DR8 low-resolution spectra](#), *ApJS*, 259, 51, 2022
29. **Yang Huang**, Beers Timothy, C. Wolf Christian et al., [Beyond spectroscopy. I. Metallicities, distances, and age estimates for over twenty million stars from SMSS DR2 and Gaia EDR3](#), *ApJ*, 925, 164, 2022
28. Yong Yang, Chengyuan Li*, **Yang Huang***, Xiaowei Liu*, [At what mass are stars braked? The implication from the turnoff morphology of NGC 6819](#), *ApJ*, 925, 159, 2022

27. **Yang Huang** et al., Erratum "Milky Way Tomography with the SkyMapper Southern Survey. II. Photometric Recalibration of SMSS DR2" (2021, ApJ, 907, 68), ApJ, 924, 141, 2022
26. Yangwei Zhang, **Yang Huang***, Jinming Bai* et al., A Systematic search for Dual AGNs in merging Galaxies (ASTRO-DARING) III: results from the SDSS spectroscopic surveys, AJ, 162, 276, 2021
25. Yangwei Zhang, **Yang Huang***, Jinming Bai* et al., A Systematic search for Dual AGNs in merging Galaxies (ASTRO-DARING) II: first results from long-slit spectroscopic observations, AJ, 162, 289, 2021
24. F. Wang, H.-W. Zhang*, **Y. Huang*** et al., Local stellar kinematics and Oort constants from the LAMOST A-type stars, MNRAS, 504, 199, 2021
23. **Y. Huang** et al., The Parallax Zero-Point of Gaia Early Data Release 3 from LAMOST Primary Red Clump Stars, ApJL, 910, 5, 2021
22. **Y. Huang** et al., Discovery of A candidate Hypervelocity star originated from the Sagittarius Dwarf Spheroidal galaxy, ApJL, 907, 42, 2021
21. **Y. Huang** et al., Milky Way Tomography with the SkyMapper Southern Survey. II. Photometric Re-calibration of SMSS DR2, ApJ, 907, 68, 2021
20. W.-X. Sun, **Y. Huang*** et al., Mapping the Galactic disk with the LAMOST and Gaia Red clump sample: V: On the origin of the "young" $[\alpha/\text{Fe}]$ -enhanced stars, ApJ, 903, 12, 2020
19. H.-F. Wang*, **Y. Huang*** et al., Diagonal Ridge pattern of different age populations found in Gaia DR2 with LAMOST Main-Sequence-Turn-Off and OB type Stars, ApJ, 902, 70, 2020
18. X.-Y. Li, **Y. Huang*** et al., Mapping the Galactic disk with the LAMOST and Gaia Red clump sample: IV: The Kinematic Signature of the Galactic Warp, ApJ, 901, 56, 2020
17. **Y. Huang** et al., Mapping the Galactic disk with the LAMOST and Gaia Red clump sample: I: precise distances, masses, ages and 3D velocities of ~ 140000 red clump stars, ApJS, 249, 29, 2020
16. G.C. Liu, **Y. Huang*** et al., Probing the galactic halo with RR Lyrae stars I: The catalog, ApJS, 247, 68, 2020
15. **Y. Huang** et al., A New Luminous blue variable in the outskirts of the Andromeda Galaxy, ApJL, 884, 7, 2019
14. Haifeng Wang*, Jeffrey L. Carlin, **Y. Huang*** et al., Mapping the Galactic Disk with the LAMOST and Gaia Red Clump Sample. III. A New Velocity Substructure and Time Stamps of the Galactic Disk Asymmetry in the Disk between 12 and 15 kpc, ApJ, 884, 135, 2019
13. **Y. Huang** et al., Milky Way tomography with the SkyMapper Southern Survey: I: Atmospheric parameters and distances of one million red giants, ApJS, 243, 7, 2019
12. **Y. Huang** et al., Member stars of the GD1 tidal stream from the SDSS, LAMOST and Gaia surveys, ApJ, 877, 13, 2019

11. **Y. Huang** et al., [On the kinematic signature of the Galactic warp as revealed by the LAMOST-TGAS data](#), *ApJ*, 864, 129, 2018
10. **Y. Huang** et al., [A new catalogue of radial velocity standard stars from the APOGEE data](#), *AJ*, 156, 90, 2018
9. **Y. Huang** et al., [The Galactic mass distribution from the LAMOST Galactic spectroscopic surveys](#), *IAU Symposium*, 330, 220, 2018
8. **Y. Huang** et al., [Discovery of Two New Hypervelocity Stars from the LAMOST Spectroscopic Surveys](#), *ApJL*, 847, 9, 2017
7. **Y. Huang** et al., [The Milky Way's rotation curve out to 100 kpc and its constraint on the Galactic mass distribution](#), *MNRAS*, 463, 2623, 2016
6. Y.-W. Zhang, **Y. Huang*** et al., [Kinematic properties of the dual AGN system J0038+4128 based on long-slit spectroscopy](#), *RAA*, 16, 5, 2016
5. **Y. Huang** et al., [Empirical Metallicity-dependent Calibrations of Effective Temperature against Colors for Dwarfs and Giants Based on Interferometric Data](#), *MNRAS*, 454, 2863, 2015
4. N.-C. Sun, X.-W. Liu*, **Y. Huang*** et al., [Galactic Disk Bulk Motions as Revealed by the LSS-GAC DR2](#), *RAA*, 15,1342, 2015
3. **Y. Huang** et al., [On the Metallicity Gradients of the Galactic Disk as Revealed by the LSS-GAC Red Clump Stars](#), *RAA*, 15, 1240, 2015
2. **Y. Huang** et al., [Determination of the local standard of rest using the LSS-GAC DR1](#), *MNRAS*, 449, 162, 2015
1. **Y. Huang** et al., [HST and LAMOST Discover a Dual Active Galactic Nucleus in J0038+4128](#), *MNRAS*, 439, 2927, 2014

CONFERENCES & WORKSHOPS

45. 2026 Workshop on the Structure, Formation, and Evolution of Star Clusters, Nanjing, Jiangsu, 22-26 April, 2026
Invited talk: *Intermediate-mass Black hole: To be or not to be?*
44. Dwarf galaxies 2026, Suzhou, Jiangsu, 17-20 April, 2026
Invited talk: *The impact of (dwarf) galaxy mergers on the Galactic disk*
43. Milky Way and Local Group Dynamics Workshop, Luoyang, Henan, 10-13 April, 2026
Invited talk: *The Fate of the Milky Way–Andromeda System: To Merge or Not?*
42. 2025 Annual Scientific Meeting of the Fujian Astronomical Society and the Institute of Theoretical Physics and Astrophysics, Xiamen University, Quanzhou, Fujian, 18 October, 2025
Invited talk: *Towards Foundation Models for Astronomy*

41. 2025 Joint Scientific Workshop of the NSFC Distinguished Research Group Program and Major Research Program, Lijiang, Yunnan, China, 26-30, September, 2025
Contributed talk: *Mapping the Milky Way with Large-Scale Surveys: Stellar Parameters, Assembly History, and Dark Matter*
40. Beijing Astronomical Society 2025 Annual Academic Symposium, Beijing, China, 25-27, September, 2025
Invited talk: *Mapping the Milky Way with Large-Scale Surveys: Stellar Parameters, Assembly History, and Dark Matter*
39. Shandong Astronomical Society 2025 Annual Academic Symposium, Dezhou, Shandong, China, 19-21, September, 2025
Invited talk: *Mapping the Milky Way with Large-Scale Surveys: Stellar Parameters, Assembly History, and Dark Matter*
38. The First Annual Science Meeting of the Earth 2.0 (ET) Space Mission, Shanghai, China, 11-15, August, 2025
Invited talk: *The Second Annual Science Meeting of the Earth 2.0 (ET) Space Mission*
37. IAUS 397: Exploring the Universe with Artificial Intelligence, Athens, Greece, 2-6 June, 2025
Contributed talk: *SpecCLIP: Combining and translating spectroscopic measurements for stars*
36. MuTian Telescope Science Workshop, Beijing, China, 24-26 March, 2025
Invited talk: *The SiTian Project: Recent Progress of the Mini-SiTian Array, Prototype Telescope, and Pathfinder Node Array*
35. Annual Scientific Meeting of NAOC, Beijing, China, 21 January, 2025
Invited talk: *A "Montion Picture" of the Galactic Warp Reveals the Shape of the Dark Matter Halo*
34. 2024 Purple Mountain Dark Matter Symposium, SuZhou, China, 11-15 October, 2024
Invited talk: *Distribution of Dark Matter in the Milky Way Based on Large-Scale Survey*
33. Beijing Astronomical Society 2024 Annual Academic Symposium, Beijing, China, 19-21 April, 2024
Invited talk: *Pertubation history of our Milky Way Disk*
32. CSST Research Progress Symposium on the Milky Way and Nearby Galaxies, Kunming, China, 15-18 January, 2024
Contributed talk: Beyond spectroscopy
31. Symposium on frontiers of underground and space physics and cosmophysics, Qiaodaohu, Hanzhou, Zhejiang, 7-12 May, 2023
Contributed talk: Mapping the distribution of dark matter in our Galaxy
30. ACAMAR Future of Traditional Survey Science, virtual workshop, 22-24 September, 2021
Invited talk: *Milky Way studies in the era of large-scale surveys (LAM-OST)*

29. Calibration Workshop on the Space-based and Ground-based Optical-IR Telescopes, Shanghai, China, 24-26 March, 2021
Invited talk: *Multi-channel Photometric Survey Telescope - Mephisto And Calibration strategy*
28. The 4th TAP Workshop for Optical-Infrared Astronomy in China, Xiamen, China, 15-17 December 2019
Contributed talk: *A systematic search for dual AGNs in merging galaxies (ASTRO-DARING)*
27. The Milky Way 2019: LAMOST and Other Leading Surveys, Yichang, China, 14-18 October, 2019
Invited talk: *Multi-channel Photometric Survey Telescope - Mephisto*
26. 2019 Advanced Telescope and Instrument Technology Conference, Gaoxiong, China, 2-5 September, 2019
Contributed talk: *Multi-channel Photometric Survey Telescope - Mephisto*
25. IAUS 353: Galactic dynamics in the era of large surveys, Shanghai, China, 30 June - 5 July, 2019
Invited talk: *Stellar kinematics and metallicities from LAMOST*
24. The 1st Donglu Astrophysics Forum, Kunming, China, 01-03 April, 2019
Galactic kinematics and dynamics from the LAMOST & Gaia Surveys
23. Galactic Archaeology in the Gaia era, Sexten, Italy, 28 January - 01 February, 2019
The LAMOST Galactic Spectroscopic Surveys
22. The life and times of the Milky Way, Shanghai, China, 12-16 November, 2018
Invited talk: *The Galactic stellar halo in the era of large-scale surveys*
21. XXXth General Assembly of the International Astronomical Union, Vienna, Austria, 20-31 August, 2018
IAU PhD prize talk: *Galactic kinematics and dynamics from the LAMOST Galactic Spectroscopic Surveys*
Contributed talk at IAUS 348: *A Systematic Search for Hypervelocity Stars from the LAMOST Spectroscopic Survey*
20. ACAMAR 4: Australia-China Workshop on Astrophysics, Chengdu, China, 6-8 June, 2018
Invited talk: *Galactic kinematics and dynamics from the LAMOST Galactic Spectroscopic Survey*
19. Chemical and dynamical evolution of galaxies, Sextan, Italy, 21-26 January, 2018
Contributed talk: *Chemical and kinematical evolution of the Galactic disc(s) as revealed by the LAMOST-TGAS*
18. China-VO and Astroinformatics, Dali, Yunnan, China, 29 November - 3 December 2017
17. Open Skies from China to South Africa – Sharing Resources and Building Collaborations in Optical and Infrared Astronomy, Lijiang, Yunnan, China, 30 October - 1 November, 2017
Contributed talk: *Chemodynamic Evolution of the Galactic Disc(s) as Revealed by the LAMOST-TGAS*

16. 2nd LAMOST-Kepler workshop, Brussels, Belgium, July 31 - August 3, 2017
Contributed talk: *Galactic kinematics and dynamics from the LAMOST Galactic Spectroscopic Surveys (presentation via Skype)*
15. 13th Asian-Pacific Regional IAU Meeting, Taipei, China, 3-7 July, 2017
Contributed talk: *A Systematic Search for Dual AGNs in Merging Galaxies*
Contributed talk: *Understanding the formation and evolution of the Galactic disc(s) using Mono-Age Population Phase-spacE Distributions (MAPPED) analysis*
14. IAU symposium 330: Astrometry and Astrophysics in the Gaia Sky, Nice, France, 24-28 April, 2017
Poster: *The mass distribution of the Milky Way*
13. 11th Zhangheng Academic Symposium, Guiyang, Guizhou, China, 23-26 June, 2017
Contributed talk: *Estimating the mass of our Milky Way from the LAMOST Galactic spectroscopic survey*
12. Near-field cosmological structure formation, Zhuhai, Guangzhou, China, 19-23 December, 2016
Contributed talk: *Estimating the mass of our Milky Way from the LAMOST Galactic spectroscopic survey*
11. Galactic Archaeology & Stellar Physics, Canberra, Australia, 21-25 November, 2016
Poster: *Dissecting the Galactic disc(s) in multi-dimensional age-metallicity-phase space using the LSS-GAC data*
10. Annual Conference of Chinese Astronomical Society, Wuhan, Hubei, China, 1-3 November, 2016
Contributed talk: *Toward a uniform calibration of the stellar atmospheric parameters on the era of large-scale Galactic spectroscopic survey*
9. The Milky Way and its environment: gaining insights into the drivers of galaxy formation and evolution, Institut d'Astrophysique de Paris in Paris, France, 19-23 September, 2016.
Contributed talk: *The Milky Way's rotation curve out to 100 kpc and its constraint on the Galactic mass distribution*
8. Workshop on Astronomical distance determination in the space age, Beijing, China, 23-27 May, 2016
Invited talk: *Chemical and kinematic studies of the Milky Way based on the LAMOST spectroscopic survey of the Galactic anti-center (LSS-GAC) red clump sample*
7. LAMOST-TGAS mini-workshop, Beijing, China, 24-25 March, 2016
Contributed talk: *Velocity & metallicity distribution function of the solar neighborhood*
6. Annual Conference of Chinese Astronomical Society, Beijing, China, 19-21 October, 2015
Contributed talk: *The Milky Way's rotation curve out to 100 kpc using LSS-GAC and SDSS data*
5. The 2015 KIAA-SHAO Bilateral Workshop, Beijing, China, 18-19 May, 2015
Contributed talk: *The Milky Way's rotation curve between 8 and 15 kpc from LSS-GAC red clump stars*
4. Sino-French "LIA-ORIGINS" Workshop, Beijing, China, 21-24 August, 2014
Contributed talk: *Determination of the Local Standard of Rest using the LSS-GAC DR1*

3. 12th Asia-Pacific Regional IAU Meeting, Daejeon, Korea, 18-22 August, 2014
Contributed talk: *Systematic search for kpc-scale dual AGN candidates*
Poster: *Determination of the Local Standard of Rest using the LSS-GAC data*
2. Chinese 2m-class optical telescope operation meeting, Kunming, China, 6-8 August, 2014
Contributed talk: *Follow-up observations of kpc-scale dual AGN candidates by 2.16 and 2.4 Meter Telescopes*
1. Annual Conference of Chinese Astronomical Society, Suzhou, Jiangsu, China, 27-31 October, 2013
Contributed talk: *The Local Standard of Rest determined by the LSS-GAC*

LAMOST USER TRAINING WORKSHOP

10. 10th, Hanzhou, Zhejiang, China, July 2-5, 2025
Invited talk: *SpecCLIP: Aligning and Translating Spectroscopic Measurements for Stars*
9. 9th, Guiyang, Guizhou, China, June 24-26, 2024
Invited talk: *Perturbation history of our Milky Way Disk*
8. 8th, BNU, Beijing, China, June 24-26, 2023
Invited talk: *On the origins of Hypervelocity stars as revealed by large-scale Galactic surveys – II*
7. 7th, YNAO, Kunming, Yunnan, China, July 5-7, 2021
Invited talk: *On the origins of Hypervelocity stars as revealed by large-scale Galactic surveys – I*
6. 6th, SHAO, Shanghai, China, July 6-7, 2019
Invited talk: *Galactic kinematics and dynamics from the LAMOST & Gaia Surveys*
5. 5th, Huairou, Beijing, China, July 1-2, 2018
Contributed talk: *The chemical and kinematic properties of Milky Way Based on the LAMOST Survey – Final Report*
4. 4th, Huairou, Beijing, China, July 1-2, 2017
Contributed talk: *The chemical and kinematic properties of Milky Way Based on the LAMOST Survey – Progress*
3. 3rd, Daxing, Beijing, China, July 13-14, 2016
Contributed talk: *The Milky Way's rotation curve out to 100 kpc*
2. 2nd, Huairou, Beijing, China, July 7-9, 2015
Invited talk: *Study kinematics and chemical evolution of Milky Way using LSS- GAC data*
1. 1st, Xinglong, Hebei, China, July 1-3, 2014
Contributed talk: *Systematic search for kpc-scale dual AGN by LAMOST*

COLLOQUIA & SEMINARS

28. Instituto de Astrofísica de Canarias, November, 20, 2025, *Mapping the Milky Way with Large-Scale Surveys: Stellar Parameters, Assembly History, and Dark Matter*

27. DoA, Westlake University, October, 04, 2025, *The Fate of the Milky Way–Andromeda System: To Merge or Not?*
26. KIAA, Peking University, September, 25, 2025, *Mapping the Milky Way with Large-Scale Surveys: Stellar Parameters, Assembly History, and Dark Matter*
25. School of Astronomy and Space Science, Astronomy Salon of University of Chinese Academy of Sciences, December, 04, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
24. China Three Gorges University, November, 30, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
23. School of Astronomy and Space Science, Nanjing University, November, 27, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
22. Scientific evolution originates in thought collisions, National Astronomical Observatories, Chinese Academy of Sciences, November, 14, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
21. Department of Astronomy, Shanghai Jiao Tong University, October, 30, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
20. Department of Astronomy, Tsinghua University, October, 17, 2024, *Hypervelocity stars: energetic guys “kissed” by massive black holes*
19. School of Physics and Astronomy, Sun Yat-sen University, June, 19, 2023, *Perturbation history of the Milky Way disk*
18. Beijing Planetarium, August, 28, 2023, *Probing the Galactic Halo with RR Lyrae Stars*
17. Qilu Normal University, June, 05, 2023, *Galactic archeology based on large-scale surveys*
16. Anhui University, April, 19, 2023, *Measurements of stellar parameters from the large-scale surveys*
15. NAOC, March, 03, 2023, *Measurements of stellar parameters from the large-scale surveys*
14. School of Physics and Electronics, Hunan Normal University, May, 24, 2022, *The mass distribution of our Galaxy from the large-scale surveys*
13. KIAA, Peking University, October, 21, 2021, *On the origins of Hypervelocity stars as revealed by large-scale Galactic surveys*
12. Department of Astronomy, Xiamen University, May, 13, 2021, *Galactic kinematics and dynamics from the LAMOST & Gaia Surveys*
11. School of Physics and Astronomy, Sun Yan-sen University, June, 17, 2019, *The LAMOST Galactic spectroscopic surveys*
10. School of Astronomy and Space Science, Nanjing University, May 8, 2019, *The LAMOST Galactic spectroscopic surveys*
9. Nanjing Institute of Astronomical Optics and Technology, National Astronomical Observatories, CAS, December 18, 2018, *Galactic kinematics and dynamics from the LAMOST Galactic Spectroscopic Surveys*

8. School of Physics and Materials Science, Anhui University, December 16, 2018, *The LAMOST Galactic spectroscopic surveys*
7. Department of Astronomy, Beijing Normal University, December 11, 2018, *Galactic kinematics and dynamics from the LAMOST Galactic Spectroscopic Surveys*
6. Research Centre for Astronomy, Astrophysics and Astrophotonics, Macquarie University, March 29, 2018, *The LAMOST Galactic spectroscopic surveys*
5. Research School of Astronomy & Astrophysics, ANU, March 19, 2018, *The LAMOST Galactic spectroscopic surveys*
4. Cambridge University, Sept. 27, 2017, *Chemical and kinematical studies of the Milky Way based on the LAMOST Galactic Spectroscopic Surveys*
3. Yunnan University, Sept. 13, 2016, *Chemical and kinematical studies of the Milky Way based on the LAMOST spectroscopic survey of the Galactic anti-center (LSS-GAC)*
2. Shanghai Astronomical Observatory, CAS, July 1, 2015, *Study local velocity fields and determine rotation curve of the Milky Way using LSS-GAC data*
1. Peking University, Oct. 22, 2013, *The local standard of rest and radial velocity bifurcation features at the Galactic disk from the LSS-GAC*

OBSEVATIONAL EXPERIENCE

- one night with CFHT telescope at CFH observatory (remote), Hawaii, USA
- 5 nights with Hale 5.1-m Telescope at Palomar Observatory (remote), California, USA
- Over 10 nights with LAMOST at Xinglong Observatory, Hebei, China
- Over 100 nights with the 2.16-m Telescope at Xinglong Observatory, Hebei, China
- Over 100 nights with the 2.4-m Telescope at Gaomeigu Observatory, Yunnan, China

TEACHING EXPERIENCE

- 2024-2026: **Advanced Astronomy** at UCAS
- 2025: **Frontiers of the Milky Way: Galactic Dynamics in the Gaia Era** at UCAS
- 2023-2023: **Opportunities and Challenges of Large-Scale Time-Domain Surveys** at UCAS
- 2019-2021: **A guide to reading research papers** at Yunnan University
- 2018-2021: **An introduction to Astronomy** at Yunnan University
- 2014: Lecturer and Mentor of the Third Observational Astronomy Workshop of Xinglong Station
- Teaching assistant at Peking University:
 - Interstellar Medium:** Spring/2014 (recitation)
 - Cosmology:** Spring/2014 (recitation)