

ZIHAO YANG 杨子浩

PERSONAL INFORMATION

DATE OF BIRTH: March 11, 1996
PLACE OF BIRTH: Huangchuan, Henan Province, China
CITIZENSHIP: Chinese
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EDUCATION

2020-now Newkirk Fellow, High Altitude Observatory (HAO), National Center for Atmospheric Research (NCAR), Boulder, CO, USA
2019-now Ph.D. student in Space Physics (with an emphasis on Solar Physics), School of Earth and Space Sciences, Peking University (PKU), Beijing, China
2015-2019 B. Sc. majoring in Space Science, School of Earth and Space Sciences, Peking University (PKU), Beijing, China

RESEARCH EXPERIENCE

1. FEB. 2017 - JAN. 2018 Undergraduate research at **School of Earth and Space Sciences, Peking University, China**
Topic: Solar Tornadoes Observed with the Interface Region imaging Spectrograph
Supervisor: Prof. Hui Tian
2. FEB. 2019 – JUN. 2019 Research for thesis of Bachelor's degree at **School of Earth and Space Sciences, Peking University, China**
Topic: Mapping Coronal Magnetic Field Through Alfvénic Wave Observations (continued)
Supervisor: Prof. Hui Tian
3. JUL. 2019 – AUG. 2019 Summer research at **Mullard Space Science Laboratory (MSSL), University College London (UCL), United Kingdom**
Topic: Jets and Loop Brightening Observed by Hinode/EIS, Hinode/XRT and SDO/AIA
Supervisor: Prof. David Long & Dr. Deborah Baker
4. MAR. 2020-now PhD project at **School of Earth and Space Sciences, Peking University, China**
Topic: Diagnosing the coronal magnetic field through observations of magnetic-field-induced transition (MIT) using Hinode/EIS
Supervisor: Prof. Hui Tian

5. JAN. 2021-now PhD project at **School of Earth and Space Sciences, Peking University, China**

Topic: On the detectability of stellar CMEs through spectral profile asymmetry
Supervisor: Prof. Hui Tian

SCIENTIFIC PUBLICATIONS

First-author publications:

1. **Yang, Z.**, Bethege, C., Tian, H.*, Tomczyk, S.*, et al. (2020). Global maps of the magnetic field in the solar corona. *Science*, 369, 694-697
2. **Yang, Z.**, Tian, H.*, Tomczyk, S., Morton, R., et al. (2020). Mapping the coronal magnetic field through magnetoseismology. *Sci China Tech Sci*, 63: 2357-2368
3. **Yang, Z.**, Tian, H.*, Peter, H., Su, Y., Samanta, T., Zhang, J., & Chen, Y. (2018). Two Solar Tornadoes Observed with the Interface Region Imaging Spectrograph. *The Astrophysical Journal*, 852(2), 79.

Other publications:

4. Chen, Y., Li, W., Tian, H., Chen, F., Bai, X., Yang, Y., **Yang, Z.**, Liu, X., Deng, Y. (2021). Forward Modeling of Solar Coronal Magnetic-field Measurements Based on a Magnetic-field-induced Transition in Fe X. *The Astrophysical Journal*, 920(2), 116.
5. Chen, Y., Liu, X., Tian, H., Bai, X., Jin, M., Li, W., Yang, Y., **Yang, Z.**, Deng, Y. (2021). Measurements of the magnetic field strengths at the bases of stellar coronae using the magnetic-field-induced transition theory. *The Astrophysical Journal Letters*, 918(1), L13.
6. Chen, Y., Tian, H., Su, Y., Qu, Z., Deng, L., Jibben, P. R., **Yang, Z.**,... & Wang, L. (2018). Diagnosing the magnetic field structure of a coronal cavity observed during the 2017 total solar eclipse. *The Astrophysical Journal*, 856(1), 21.
7. Chen, Y., Tian, H., Xu, Z., Xiang, Y., Fang, Y., & **Yang, Z.** (2017). Ellerman bombs observed with the new vacuum solar telescope and the atmospheric imaging assembly onboard the solar dynamics observatory. *Geoscience Letters*, 4(1), 30.

AWARDS

SEPT. 2021	First Place Award of Best Student Poster Presentation, 16 th European Solar Physics Meeting, The European Solar Physics Division of the European Physical Society (EPS)
DEC. 2020	Merit Student of Academic Year 2019-2020, Peking University
DEC. 2020	National Scholarship (for Ph.D. student, 30000 RMB), Ministry of Education, People's Republic of China
JUN. 2019	Excellent Graduate, Peking University
MAY 2019	Excellent Project Award for Peking University Undergraduate Principal's Funding 2018, Peking University
DEC. 2018	Merit Student of Academic Year 2017-2018, Peking University
DEC. 2018	Leo KoGuan Scholarship (10, 000 RMB), Peking University
NOV. 2018	Excellent Undergraduate Research Program for the 2017-2018 Academic Year, School of Earth and Space Sciences, Peking University

- NOV. 2018 Golden Award of SESS Academic Wishing Star for the 2017-2018 Academic Year,
School of Earth and Space Sciences, Peking University
- NOV. 2017 Golden Award of SESS Academic Wishing Star for the 2016-2017 Academic Year,
School of Earth and Space Sciences, Peking University
- NOV. 2013 High School Merit Student of Academic Year 2013-2014 of Henan Province,
Department of Education, Henan Province

SCIENTIFIC CONFERENCES PRESENTATIONS

1. Yang, Z.: Two Solar Tornadoes Observed with the Interface Region Imaging Spectrograph, Pasadena, COSPAR 2018, CA, USA, Jul. 14-22, 2018, **oral presentation**
2. Yang, Z.: Solar Tornadoes Observed with IRIS: Rotating Motion of Prominence Materials, CGU 2017, Beijing, Oct. 15-18, 2017, poster presentation
3. Yang, Z.: Solar Tornadoes Observed with IRIS, the 4th International Space Weather Conference (Chinese), Beijing, Aug. 1-4, 2017, **oral presentation** (in Chinese)
4. Yang, Z.: Advances in measurements of the coronal magnetic field through magneto-seismology and magnetic-field-induced transition, 2020 Chinese Astronomical Society Meeting, Beijing, Oct. 13-14, 2020, **oral presentation** (in Chinese) (2020 年中国天文年会)
5. 杨子浩:《ASO-S 日冕仪与地面日冕仪的联合观测》, 第三届 ASO-S 科学大会, 厦门, 2020 年 11 月 25-28 日, 口头报告 (Yang, Z.: Joint Observations of ASO-S/LST and ground-based coronagraph, the 3rd ASO-S Science Conference, Xiamen, Nov. 25-28, 2020, oral presentation)
6. Yang, Z., et al.: Mapping the Global Magnetic Field in the Solar Corona Through Magnetoseismology, EGU General Assembly 2021 (vEGU21), Apr. 26, 2021, **oral presentation** (virtual meeting)
7. Yang, Z., et al.: Mapping the Global Magnetic Field in the Solar Corona Through Magnetoseismology, AOGS 2021, Singapore, Aug. 1-5, 2021, **oral presentation** (virtual meeting)
8. Yang, Z., et al.: On the Detectability of Stellar CMEs Through Spectral Profile Asymmetries, AOGS 2021, Singapore, Aug. 1-5, 2021, **poster presentation** (virtual meeting)
9. Yang, Z., et al.: Magnetoseismology for the solar corona: from ~10 Gauss to coronal magnetograms, 16th European Solar Physics Meeting, Sept. 6-10, 2021, **oral presentation** (virtual meeting)

PROFESSIONAL ACTIVITIES

Peer reviewer for *The Astrophysical Journal* (during undergraduate study), *Advances in Space Research*.

OTHER PROFESSIONAL EXPERIENCES

1. MAY 2017 Attending Solar EUV Spectroscopy Workshop (太阳极紫外光谱研讨会) hosted in Beijing, China
2. JUL. 1, 2018 Attending The 2nd Workshop on China Large Solar Coronagraph (我国大型日冕仪第二次研讨会) hosted in Weihai, Shandong, China
3. JUL. 2-4, 2018 Attending Solar Eruption Workshop (太阳爆发学术研讨会) hosted in Weihai, Shandong, China
4. SEPT. 22-24, 2018 Visiting University of Kiel (Christian-Albrechts-Universität zu Kiel) in Kiel,

Germany and presented an oral report

5. SEPT. 25-28, 2018 Visiting Max-Planck Institute for Solar System Research in Göttingen, Germany and presented an oral report
6. OCT. 1, 2018 Visiting Helmholtz-Centre Potsdam - German Research Centre for Geosciences (GFZ) in Potsdam, Germany and presented an oral report
7. JUL. 23-25, 2019 Attending "Preparing for the next generation of ground-based solar physics observations" Workshop hosted in MSSL, United Kingdom and presented an oral report on behalf of Dr. Hui Tian
8. AUG. 5-7, 2019 Visiting Northumbria University in Newcastle, United Kingdom on discussion of CoMP data analysis with Dr. Richard Morton
9. NOV. 3-8, 2019 Attending IRIS-10 Workshop in Bangalore, India and presented a poster on behalf of Mr. Yingjie Zhu (University of Michigan, Ann Arbor)
10. JAN. 13-15, 2020 Attending The 2nd DKIST Data Processing Workshop hosted at CSUN, Northridge, CA, United States

LANGUAGE PROFICIENCY

CHINESE: Native Speaker

ENGLISH: Fluent (TOEFL Score: 110; October, 2016)

COMPUTER SKILLS

IDL, C, Python, MATLAB, LaTeX