Tianjun Gan

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EDUCATION

2018.09 - 2023.06	PhD in Astronomy, Tsinghua University, Beijing, China
2014.09 - 2018.06	BS in Physics, Zhejiang University, Zhejiang, China

RESEARCH INTERESTS

Formation, evolution and occurrence rate of giant planets around M-type stars; Characterization and population statistics of BDs and low-mass M dwarfs. Connection between stellar abundance pattern and planet formation, esp. solar twins; Transiting planet detection, follow-up and characterization.

RESEARCH PROGRAMS

Giant Planet Around Small Star (GPASS), Lead	2020-Present;
TESS low mass stellar companion characterization program, Lead	2020-Present;
LCO Key Followup Program for TESS (PI: Avi Shporer), Member	2019-Present;
Magellan TESS Survey (PI: Johanna Teske), Member	2020-Present;
TESS Follow-up Observing Program (TFOP), Member	2019-Present.

OBSERVING PROPOSALS & EXPERIENCE

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AAT/Veloce (9 hrs)	9 hrs/2023B
IRTF/SpeX (15 hrs)	15 hrs/2023A

CFHT/SPIRou (41 hrs) 7.5 hrs/2020A, 15 hrs/2021A, 10.5 hrs/2022B, 8 hrs/2023A

SMARTS/CHIRON (60 hrs) 60 hrs/2022A

LCOGT (85 hrs) 60 hrs/2020A, 25 hrs/2021A

As Co-I:

LCOGT Two key programs (2020 and 2023, PI: Avi Shporer)

SELECTED SEMINAR AND CONFERENCE TALKS, POSTERS

2023.12	Open Problems in the Astrophysics of Gas Giants (Contributed Talk)
2023.10	SPLAT talk at University of Hawaii (Seminar)
2023.08	Asia Oceania Geosciences Society 2023 (Contributed Talk)
2023.04	2023 International Conference of Deep Space Sciences (Contributed Talk)
2023.03	The 5th Youth Planet Conference (Contributed Talk)
2022.12	Earth 2.0 (ET) Mission Science Seminar (Invited Talk)
2022.11	Caltech: The mysteries of giant planets around M dwarfs (Group Meeting Talk)
2022.10	TESS Science Team Meeting #29 (Contributed Talk)
2022.07	Cool Stars 21 conference (Poster)

- 2022.01 CFHT/SPIRou Science Seminars (Invited Talk)
- 2021.12 The China's Telescope Access Program meeting (Virtual)
- 2021.12 The 6th China's Telescope Access Program User Meeting: *Radius valley of small planets around M dwarfs* (Invited Talk)
- 2021.01 The 5th China's Telescope Access Program User Meeting: *TESS follow-up observations with LCO and CFHT* (Invited Talk)
- 2021.12 Chinese Astronomical Society Meeting (Contributed Talk)
- 2021.08 TESS Science Conference II (Contributed Talk)
- 2021.06 Chinese Planetary Science Society Annual Conference (Contributed Talk)
- 2020.12 Earth 2.0 (ET) Mission workshop (Invited Talk)
- 2020.12 Earth 2.0 (ET) Transit Space Mission Science Meeting (Invited Talk)

Publication List

Leading Author: ADS Library

- 1. **Gan, T.** & Cadieux, C., et al., A Massive Hot Jupiter Orbiting a Metal-rich Early M Star Discovered in the TESS Full-frame Images, 2023, AJ, 166, 165
- 2. Lin, Z., Gan T., et al., One high mass brown dwarf and two objects near the hydrogen burning mass limit, 2023, MNRAS, 523, 6162
- 3. **Gan, T.** & Wang, X. S., et al., Occurrence Rate of Hot Jupiters Around Early-type M Dwarfs Based on Transiting Exoplanet Survey Satellite Data, 2023, AJ, 165, 17
- 4. **Gan, T.** & Soubkiou, A., et al., *TESS discovery of a sub-Neptune orbiting a mid-M dwarf TOI-2136*, 2022, MNRAS, 514, 4120
- 5. **Gan, T.** & Lin, Z., et al., *TOI-530b: A giant planet transiting an M dwarf detected by TESS*, 2022, MNRAS, 511, 83
- 6. **Gan, T.** & Bedell, M., et al., *HD 183579b: a warm sub-Neptune transiting a solar twin detected by TESS*, 2021, MNRAS, 507, 2220
- 7. **Gan, T.** & Wang, X. S., et al., *Revisiting the HD 21749 planetary system with stellar activity modelling*, 2021, MNRAS, 501, 6042
- 8. Gan, T. & Shporer, A., et al., LHS 1815b: The First Thick-disk Planet Detected by TESS, 2020, AJ, 159, 160

Selected Contributed Work: ADS Library

- 1. Sun, Q. & Wang, X. S., Gan T., et al., A Search for Exoplanets in Open Clusters and Young Associations based on TESS Objects of Interest, 2022, RAA, 22, 7
- 2. Teske, J. & Wang, X. S., Wolfgang, A., **Gan, T.**, et al., *The Magellan-TESS Survey. I. Survey Description and Midsurvey Results*, 2021, ApJS, 256, 33

Professional Services

Referee for ApJ, AJ.

TEACHING AND MENTORING EXPERIENCE

2022 Spring TA for Observational Astronomy (Instructor: Prof. Xuesong Wang)

2020 & 2021 Fall	TA for The Beauty of the Universe (Instructor: Prof. Shude Mao)
2022 - 2023	Ximing Xu, Undergraduate at Western University
2020 - now	Zitao Lin, PhD candidate at Tsinghua University
2020 - 2021	Gavin Wang, Undergraduate at Johns Hopkins University

SELECTED AWARDS

2023	VIDA Postdoctoral Fellowship at Vanderbilt University (declined)
2022	Second-class Scholarship of China Astronomical Society
2016&2021	National Scholarship (Highest Student Award)
2015&2021	First-class Academic Scholarship
2019	First-class AMD Scholarship
2017	Second-class Academic Scholarship
2015	National Encouragement Scholarship

VISITING EXPERIENCE

• 2019.10 – 2020.01: Visiting Student, host: Stephen Shectman, Observatories of the Carnegie Institution for Science, 813 Santa Barbara Street, Pasadena, CA 91101, USA