

Tianqi Cang

Assistant Researcher in Astrophysics, Beijing Planetarium

astrocang@gmail.com
https://astrocang.com
Updated September 2026

Stellar astrophysicist studying magnetic fields, stellar activity, and exoplanet environments through high-resolution spectropolarimetry and time-domain photometry.

EDUCATION

- 2017-2021** **Ph.D. in Astrophysics**
Université de Toulouse / Institut de Recherche en Astrophysique et Planétologie (IRAP) | Toulouse, France
Thesis: Modélisation de l'Activité des Étoiles Froides à partir de données Photométriques et Spectropolarimétriques
- 2010-2017** **B.Sc. and M.Sc. in Astronomy and Astrophysics**
Beijing Normal University | Beijing, China

PROFESSIONAL APPOINTMENTS

- Sep 2025-present** **Assistant Researcher in Astrophysics**
Beijing Planetarium | Beijing, China
- Feb 2022-Sep 2025** **LAMOST Fellow and Postdoctoral Researcher in Astrophysics**
Beijing Normal University | Beijing, China

FUNDING

- 2026-2029** **PI · Beijing Nova Program (北京市科技新星), No. 202604841350**
Award amount: CNY 400,000
- 2026-2028** **PI · NSFC Young Scientists Fund (Category C), No. 12503035**
Magnetic-field Measurements and Surface-structure Studies of M Dwarfs · Award amount: CNY 300,000
- 2024-2029** **Co-I · NSFC Major Research Instrument Development Project, No. 12427804**
Development of a High-performance Echelle Spectropolarimeter for Stellar Observations · Total award: CNY 10,000,000
- 2023-2026** **Co-I · NSFC General Program, No. 12273002**
Statistical Study of Nonlinear Asteroseismic Effects in Gravity Modes · Total award: CNY 500,000
- 2022-2024** **PI · China Postdoctoral Science Foundation, No. 2023M730297**
Award amount: CNY 80,000

SELECTED PUBLICATIONS

- 2026** **Measuring the Magnetic Fields in the Chromospheres of Low-mass Stars**
Nature Communications 17, 64
Tianqi Cang, Pascal Petit, Jean-François Donati, et al.
- 2025** **Seismic Test of the Mass-Radius Relationship of Hydrogen-atmosphere White Dwarf Stars**
Journal of Astrophysics and Astronomy 46, 81
Tianqi Cang, Jiayi Zhang, Jianning Fu, He Zhao, and Weikai Zong
- 2025** **Inactive Longitude and Superflare in the Active Single-lined Pre-main-sequence Binary V2279 Cyg**
The Astrophysical Journal 990, 27
Xueying Hu, Tianqi Cang, Jianning Fu, et al.
- 2021** **Short-term Variations of Surface Magnetism and Prominences of the Young Sun-like Star V530 Per**
Astronomy & Astrophysics 654, A42
Tianqi Cang, Pascal Petit, Jean-François Donati, and Colin P. Folsom

2020	Magnetic Field and Prominences of the Young, Solar-like, Ultra-rapid Rotator V530 Persei Astronomy & Astrophysics 643, A39 Tianqi Cang, Pascal Petit, Jean-François Donati, et al.
All	Complete publication list NASA ADS and publication details

RESEARCH SOFTWARE

Research software	TESSA Python · Zeeman-Doppler imaging Interactive configuration, execution, and visualization of stellar magnetic-surface inversions.
Open source	LSDpy_UI Python · Spectropolarimetric analysis Least Squares Deconvolution of stellar spectra through a browser interface or command line.
Open source	astroReport Python · Literature monitoring Automated arXiv monitoring and AI-assisted astronomy digests delivered by email.

OUTREACH

28 Feb 2026	Popular-science article: “Red Dwarfs and Planetary Habitability” Published in Amateur Astronomer.
13 Dec 2025	Public talk: “How Do Astronomers Make Images of Stars?” Public talk for high-school students at Beijing Planetarium.

Languages	Research interests
Chinese - Native speaker · English - B2 · French - A2	Stellar magnetic fields · High-resolution spectropolarimetry · Magnetic imaging and stellar surface structures · Stellar activity and flares · Exoplanet space weather