

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONTACT INFORMATION     | <p>Korea Astronomy and Space Science Institute,<br/>776 Daedeok-daero,<br/>Yuseong-gu, Daejeon, 34055<br/>Republic of Korea</p> <p>Website: <a href="https://hyteng.netlify.app">hyteng.netlify.app</a><br/>Email: <a href="mailto:hyteng@bao.ac.cn">hyteng@bao.ac.cn</a></p>                                                                                                                                                                                                                                                                                                                                              |
| RESEARCH INTERESTS      | Planet search and characterization, radial velocity, young planetary systems, stellar obliquity, mid-to-Late M dwarfs, evolved stars, stellar jitter, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| WORKING EXPERIENCE      | <p><b>East Asian Core Observatories Association (EACOA)</b></p> <p>EACOA fellow, From October 2023</p> <ul style="list-style-type: none"> <li>• Research Field: Exoplanet searching, radial velocity, transit follow-up</li> <li>• Institute 1: Korea Astronomy and Space Science Institute<br/>Host 1: Professor Byeong-Cheol Lee</li> <li>• Institute 2: National Astronomical Observatory of China<br/>Host 2: Professor Gang Zhao</li> <li>• Institute 3: National Astronomical Observatory of Japan<br/>Host 3: Professor Eiichiro Kokubo</li> </ul>                                                                  |
| EDUCATION               | <p><b>Tokyo Institute of Technology</b></p> <p>Ph.D. Earth and Planetary Sciences, April 2020 – September 2023</p> <ul style="list-style-type: none"> <li>• Research Field: Exoplanet searching, radial velocity, evolved stars</li> <li>• Supervisor: Professor Bun'ei Sato</li> </ul> <p>M.Sc. Earth and Planetary Sciences, April 2018 – March 2020</p> <ul style="list-style-type: none"> <li>• Research Field: Exoplanet searching, radial velocity, evolved stars</li> <li>• Supervisor: Professor Bun'ei Sato</li> </ul> <p><b>Beijing Normal University</b></p> <p>B.Sc. Astronomy, September 2012 – June 2016</p> |
| VISITING AND INTERNSHIP | <p><b>University of Hawaii</b></p> <p><b>Visiting</b> August 2024</p> <ul style="list-style-type: none"> <li>• Research Field: Stellar Obliquity of young planetary systems</li> <li>• Host: Dr. Fei Dai</li> </ul> <p><b>National Astronomical Observatory of China</b></p> <p><b>Visiting</b> January 2022 – April 2022</p> <ul style="list-style-type: none"> <li>• Research Field: Exoplanet searching, radial velocity, evolved stars</li> <li>• Supervisor: Professor Gang Zhao</li> </ul> <p><b>National Astronomical Observatory of China</b></p> <p>BNU regular internship project July 2015 – August 2015</p>    |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| RESEARCH PROJECT                       | <p>As an investigator</p> <ul style="list-style-type: none"> <li>• Stellar obliquity of young planetary systems</li> <li>• Okayama Planet Search Program (OPSP)</li> <li>• East Asian Planet Search Network (EAPS-Net)</li> <li>• InfraRed Doppler – Subaru Strategic Program (IRD-SSP)</li> <li>• Subaru IRD TESS Intensive Follow-up Project</li> <li>• Asteroseismic Masses of GK giant stars in EAPS-Net with TESS</li> <li>• Rossiter-McLaughlin Effect of TESS candidates Orbiting Evolved Stars</li> <li>• Planet Search around Giant Stars in the Galactic Thick Disk</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | April 2018 – Present |
| OBSERVATION EXPERIENCE                 | <p><b>Optical</b></p> <ul style="list-style-type: none"> <li>• High Dispersion Echelle Spectrograph (HIDES), 188cm telescope, Okayama Astrophysical Observatory.</li> <li>• InfraRed Doppler (IRD), Subaru Telescope, Mauna Kea Observatory.</li> <li>• High Dispersion Spectrograph (HDS), Subaru Telescope, Mauna Kea Observatory, 3 nights in S23B and S24B, as <b>PI</b>.</li> <li>• High Resolution Spectrograph (HRS), 2.16-m Telescope, Xinglong Observatory.</li> <li>• Bohyunsan Optical Echelle Spectrograph (BOES), 1.5-m Telescope, Bohyunsan Observatory.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2018 – Present       |
| MAIN-AUTHOR PUBLICATIONS ON EXOPLANETS | <p>[6] <b>Teng, H.-Y.</b>, Dai, F., Howard, A., et al. The <math>\sim 50</math>-Myr-Old TOI-942c is Likely on an Aligned, Coplanar Orbit and Losing Mass. Accepted in <i>Astronomical Journal</i></p> <p>[5] Xiao, G.-Y., <b>Teng, H.-Y.</b>, Zhou, J.-Z., et al. Two long-period giant planets around two giant stars: HD 112570 and HD 154391. <i>Astronomical Journal</i>, doi:10.3847/1538-3881/ad11de</p> <p>[4] <b>Teng, H.-Y.</b>, Sato, B., Kuzuhara, H., et al. Revisiting Planetary Systems in Okayama Planet Search Program: A new long-period planet, RV astrometry joint analysis, and multiplicity-metallicity trend around evolved stars.. <i>Publications of the Astronomical Society of Japan</i>, doi:10.1093/pasj/psad056.</p> <p>[3] <b>Teng, H.-Y.</b>, Sato, B., Kunitomo, M., et al. A Close-in Planet Orbiting Giant Star HD 167768. <i>Publications of the Astronomical Society of Japan</i>, doi:10.1093/pasj/psac097.</p> <p>[2] <b>Teng, H.-Y.</b>, Sato, B., Takarada, T., et al. A Trio of Giant Planets Orbiting Evolved Star HD 184010. <i>Publications of the Astronomical Society of Japan</i>, doi:10.1093/pasj/psac070</p> <p>[1] <b>Teng, H.-Y.</b>, Sato, B., Takarada, T., et al. Regular radial velocity variations in nine G- and K-type giant stars: Eight planets and one planet candidate. <i>Publications of the Astronomical Society of Japan</i>, doi:10.1093/pasj/psab112.</p> <p>* Planet detection paper based on Okayama Planet Search Program were submitted to PASJ.</p> |                      |
| OTHER PUBLICATIONS ON EXOPLANETS       | <p>[6] Kuzuhara, M., et al. Gliese 12 b: A Temperate Earth-sized Planet at 12 pc Ideal for Atmospheric Transmission Spectroscopy. <i>Astronomical Journal</i>, 967, 2. doi: 10.3847/2041-8213/ad3642</p> <p>[5] Xiao, G.-Y. Liu, Y.-J., <b>Teng, H.-Y.</b> et al. The Masses of a Sample of Radial-Velocity Exoplanets with Astrometric Measurements. <i>Research in Astronomy and Astrophysics</i>, 23, 055022. doi:10.1088/1674-4527/acb7e</p> <p>[4] Hirano, T. et al. An Earth-sized Planet around an M5 Dwarf Star at 22 pc. <i>Astronomical Journal</i>, 165, 131. doi:doi:10.3847/1538-3881/acb7e1 (Teng included)</p> <p>[3] Kagitani, Taiki et al. The mass determination of TOI-519 b: a transiting close-in giant planet around a metal-rich mid-M dwarf. <i>Publications of the Astronomical Society of Japan</i>, 75, 713. doi:10.1093/pasj/psad031 (Teng included)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |

[2] Mori, Mayuko et al. TOI-1696: A Nearby M4 Dwarf with a 3  $R_{\oplus}$  Planet in the Neptunian Desert. *Astronomical Journal*, 163, 298. doi:10.3847/1538-3881/ac6bf8. (Teng included)

[1] Kawauchi, K. et al.. Validation and atmospheric exploration of the sub-Neptune TOI-2136b around a nearby M3 dwarf. *Astronomy & Astrophysics*, 666, A4. doi:10.1051/0004-6361/202243381. (Teng included)

#### PUBLICATIONS IN OTHER FIELDS

[5] Wan, H.-Y. Cao, S.-L. **Teng, H.-Y.**, Liu, Y. Zhang, J.-C. Zhang, T.-J. Direct constraint on cosmic neutrino mass using observational Hubble parameter data. *Research in Astronomy and Astrophysics*, 18, 124, October 2018. doi:10.1088/1674-4527/18/10/124.

[4] Cao, S.-L. **Teng, H.-Y.**, Wan, H.-Y. Yu, H.-R. Zhang, Zhang, T.-J. Information content in the angular power spectrum of weak lensing: wavelet method. *European Physical Journal C*, 78, 170, February 2018. doi:10.1140/epjc/s10052-018-5616-4.

[3] Emberson, J. D. Yu, H.-R. Inman, D., Zhang, T.-J., Pen, U.-L., Harnois-Déraps, J., Yuan, S., **Teng, H.-Y.**, Zhu, H.-M., Chen, X. Xing, Z.-Z. Cosmological neutrino simulations at extreme scale. *Research in Astronomy and Astrophysics*, 17, 085, August 2017. doi:10.1088/1674-4527/17/8/85.

[2] Yu, H.-R., Emberson, J. D., Inman, D., Zhang, T.-J., Pen, U.-L., Harnois-Déraps, J., Yuan, S., **Teng, H.-Y.**, Zhu, H.-M., Chen, X. Xing, Z.-Z. Du, Y., Zhang, L., Lu, Y., Liao, X. Differential neutrino condensation onto cosmic structure. *Nature Astronomy*, 1, 0143, July 2017. doi:10.1038/s41550-017-0143.

[1] **Teng, H.-Y.**, Huang, Y., Zhang, T.-J. Degeneracy and discreteness in cosmological model fitting. *Research in Astronomy and Astrophysics*, 16, 50, March 2016. doi:10.1088/1674-4527/16/3/050.

#### PRESENTATIONS (SELECTED)

[12] The  $\sim 50$ -Myr-Old TOI-942c is Likely on an Aligned, Coplanar Orbit and Losing Mass, Poster presentation in *TESS Science Conference III*, Boston, MA, USA, July, 2024.

[11] Latest Progress of the East Asian Planet Search Network (updated), Oral presentation in *AGOS2024*, Pyeongchang, South Korea, June, 2024.

[10] Latest Progress of the East Asian Planet Search Network (updated), Poster presentation in *Exoplanets 5*, Leiden, Netherlands, June, 2024.

[9] The Progress of East Asian Planet Search Network, Oral presentation in *Exoplanets & Planet Formation Workshop 2023*, Beijing, China, December, 2023.

[8] Revisiting planetary systems in Okayama Planet Search Program, Poster presentation in *Protostars and Planets VII*, Kyoto, Japan, April, 2023.

[8] Two Unique Planetary systems around Giant Stars Discovered by Okayama Planet Search Program, Oral presentation in *ASJ meeting (2023 spring)*, Tokyo, Japan, 2023.

[7] Latest discoveries from Okayama Planet Search Program, Oral presentation in *American Astronomical Society 241* (Online), USA, 2023.

[6] East Asian Planet Search Program (EAPS-Net) – Planet search around evolved stars, Invited oral presentation in *ET seminar*, Shanghai Astronomical Observatory, Chinese Academy of Science (Online), China, 2022.

[5] Research on Exoplanets around G/K Giant stars by Radial Velocity method, Invited oral presentation in *NAOC Exoplanet Seminar* (Online), China, 2022.

[4] Regular Radial Velocity Variations in Nine G- and K-type Giant Stars: Eight Planets and One Planet Candidate, Oral presentation in *The Astronomical Society of Japan Annual Meeting (2022 Spring)* (Online), Japan, 2022.

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                            | <p>[3] Revisiting Planet-harboursing Retired A star-I, Poster presentation in <i>Exoplanets III</i> (Online), Heidelberg, Germany, 2020.</p> <p>[2] Planetary Companions to Five G/K-type Evolved Stars, Oral presentation in <i>Workshop on TESS follow-up Observation for Exoplanet search</i> hosted by Korea Astronomy and Space Science Institute (KASI), Busan, Korea, 2019.</p> <p>[1] High resolution neutrino large scale structure simulation, Oral presentation in <i>the symposium in FAST973: Dark Matter Cosmology Workshop</i> - Urumuqi, China, 2016.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| ACADEMIC AWARDS (SELECTED) | <p>[4] Tsubame Scholarship “Special Scholarship”, 52,950 JPY per month, awarded by Tokyo Institute of Technology, 2020 – 2023,</p> <p>[3] “Excellent Master Thesis” honored by Department of Earth and Planetary Sciences, Tokyo Institute of Technology, 2020.</p> <p>[2] First Prize in China Adolescents Science and Technology Innovation Contest, 2015.</p> <p>[1] Scholarship of National Astronomical Observation, Chinese Academy of Science, 2015.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| SKILLS                     | <p>Analysis</p> <ul style="list-style-type: none"> <li>• Time series analysis, MCMC, Gaussian Process</li> </ul> <p>Programming</p> <ul style="list-style-type: none"> <li>• Most: Python, IRAF (including PyRAF: with a half-automated pipeline for HIDES echelle spectrum reduction)</li> <li>• Also: Bash, C, Fortran, MATLAB</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>• Chinese (Native), English (Proficiency)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| OUTREACH EXPERIENCE        | <p>Conference organizing</p> <ul style="list-style-type: none"> <li>• Exoplanets &amp; Planet Formation Workshop 2023 <span style="float: right;">December 2023</span></li> </ul> <p>Teaching assistant at Tokyo Tech</p> <ul style="list-style-type: none"> <li>• “Experimental Methods of Earth and Planetary Sciences ”<br/>— safety and data analysis — for undergraduates. <span style="float: right;">Spring semester 2019</span></li> <li>• “Basic Laboratory”<br/>— basic observation and data analysis — for undergraduates. <span style="float: right;">Fall semester 2019</span></li> </ul> <p>Mentor: undergraduate research program</p> <ul style="list-style-type: none"> <li>• Zi-Lan Xiao (Beijing Normal University at Zhuhai; supervisor: Prof. Tong-Jie Zhang)<br/>Topic: <i>Cosmology research on Observed Hubble Data</i> <span style="float: right;">August 2021 – present</span></li> </ul> <p>Astronomy teacher for amateurs</p> <ul style="list-style-type: none"> <li>• Beijing No.44 Middle School. <span style="float: right;">Fall semester 2015</span></li> <li>• Beijing Primary School. <span style="float: right;">Fall semester 2015</span></li> <li>• Experimental Primary School of Beijing Normal University. <span style="float: right;">September 2015 – July 2016</span></li> <li>• Meteorite Laboratory of <i>Chinese National Astronomy</i> <span style="float: right;">Summer 2016</span></li> </ul> <p>Other astro related activities</p> <ul style="list-style-type: none"> <li>• Earth and Planetary Seminar Committee in charge of lecture invitations. <span style="float: right;">2020, 2022</span></li> <li>• Annual star-gazing for public at Earth and planetary sciences, Tokyo Tech. <span style="float: right;">2018, 2019</span></li> </ul> |  |