

# Wen-Han ZHOU (周文翰)

Email: wenhan.zhou@oca.eu  
The University of Tokyo, Tokyo, Japan  
ORCID: <https://orcid.org/0000-0003-4229-8936>  
Homepage: <http://wh-zhou.github.io>

## EMPLOYMENT

### The University of Tokyo

Tokyo, Japan

JSPS Postdoc Fellow (host: Seiji Sugita)

Apr. 2025 —

## EDUCATION

### Observatoire de la Côte d’Azur

Nice, France

Ph.D. in Astrophysics (supervisor: Patrick Michel)

Jan. 2022 — Dec. 2024

### University of Hong Kong

Hong Kong, China

M.Phil. in Physics (supervisor: Meng Su)

Sep. 2018 — Apr. 2021

### Wuhan University

Wuhan, China

B.Eng. in Engineering

Sep. 2014 — June 2018

## RESEARCH INTEREST

Small bodies; Dynamics; Planetary system evolution.

## FIRST-AUTHOR PUBLICATIONS (including 2 sole-author papers)

1. **Zhou, W. H.**, Michel, P., Delbo, M., Wang, W., Wang, Y., Durech, J., & Hanus, J. (2025), Confined tumbling state as the origin of the excess of slowly rotating asteroids. *Nature Astronomy*, 1-8.  
*Highlight: Explain the observed period-diameter distribution of asteroids; supervised a master student.*
2. **Zhou, W. H.** (2024), The binary Yarkovsky effect on the primary asteroid with application to singly synchronous binary asteroids. *A&A Letters*, 692, L2.  
*Highlight: Complete the basic theoretical framework of the “Binary Yarkovsky” effect.*
3. **Zhou, W. H.**, Vokroulicky, D., Kanamaru, M., Agrusa, H., Delbo, P., Pravec, M., & Michel, P. (2024). The Yarkovsky effect on the long-term evolution of binary asteroids. *ApJL*, 968, L3.  
*Highlight: Discover the “Binary Yarkovsky” effect.*
4. **Zhou, W. H.**, Liu, S., & Lin, D. C. (2024). White Dwarf Magnetospheres: Shielding Volatile Content of Icy Objects and Implications for Volatile Pollution Scarcity. *A&A*, 687, A107.
5. **Zhou, W. H.**, & Michel, P. (2024). A semi-analytical thermal model for craters with application to the crater-induced YORP effect. *A&A*, 682, A130.
6. **Zhou, W. H.**, Zhang, Y., Yan, X., & Michel, P. (2022). The crater-induced YORP effect. *A&A*, 668, A70.
7. **Zhou, W. H.**, Liu, S. F., Zhang, Y., & Lin, D. N. (2022). Observable tests for the light-sail scenario of interstellar objects. *A&A*, 667, A108.
8. **Zhou, W. H.** (2020). ‘Oumuamua’s Rotation with the Mechanical Torque Produced by Interstellar Medium. *ApJ*, 899(1), 42.

## CO-AUTHORED PUBLICATIONS

9. Athanasopoulos, D., Hanuš, J., Avdellidou, C., ... **Zhou, W. H.** & Agrusa, H. (2024). Spin states of X-complex asteroids in the inner main belt-I. Investigating Athor and Zita collisional families. *A&A*, 690, A215.
10. Ren, B. B., Rebollido, I., Choquet, É., **Zhou, W. H.**, Perrin, M. D., Schneider, G., ... & Soummer, R.

(2023). Debris Disk Color with the Hubble Space Telescope. [A&A, 672, A114](#).

## VISITING EXPERIENCE

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<b>Westlake University</b> (host: Douglas N.C. Lin) Hangzhou, China	<i>Mar. 2025</i>
<b>The University of Tokyo</b> (host: Seiji Sugita) Tokyo, Japan	<i>Aug. 2024 - Sep. 2024</i>
<b>Charles University</b> (host: David Vokrouhlický) Prague, Czech Republic	<i>May 2024 - Jun. 2024</i>

## CONFERENCES/WORKSHOPS/SEMINARS

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<b>Group Seminar</b> School of Astronomy and Space Science, NJU, China	<i>Mar. 2025</i>
<b>Group Seminar</b> Department of Astronomy, ZJU, China	<i>Mar. 2025</i>
<b>Group Seminar</b> Shanghai Astronomical Observatory, CAS, China	<i>Feb. 2025</i>
<b>Group Seminar</b> School of Astronomy and Space Science, NJU, China	<i>Dec. 2024</i>
<b>Group Seminar</b> Center for Astrophysics, Harvard, USA	<i>Oct. 2024</i>
<b>EPSC2024</b> Berlin, Germany	<i>Sep. 2024</i>
<b>Group Seminar</b> National Astronomical Observatory of Japan, Japan	<i>Sep. 2024</i>
<b>Visitor Talk</b> Earth-Life Science Institute, Tokyo Tech, Japan	<i>Sep. 2024</i>
<b>Group seminar</b> Department of Earth and planetary science, UTokyo, Japan	<i>Sep. 2024</i>
<b>Group seminar</b> Department of Space and Planetary Sciences, Sun Yat-Sen University, China	<i>Aug. 2024</i>
<b>Group seminar</b> Department of Earth and space sciences, SUSTech, China	<i>Aug. 2024</i>
<b>Dynamics and physics in the solar system</b> University of Pisa, Pisa, Italy	<i>Jun. 2024</i>
<b>HERA International Workshop 2024</b> ESTEC, Noordwijk, Netherland	<i>Apr. 2024</i>
<b>Winter School on small bodies in the Solar System</b> Ecole de Physique des Houches, Les Houches, France	<i>Feb. 2024</i>
<b>HERA International Workshop 2023</b> ESTEC, Noordwijk, Netherland	<i>Oct. 2023</i>
<b>4th Workshop on Thermal Models for Planetary Science</b> ESTEC, Noordwijk, Netherland	<i>Apr. 2023</i>
<b>Workshop on applications of radar instruments in planetary science</b> Beijing, China (online)	<i>Jan. 2023</i>
<b>EPSC Meeting 2022</b> Granada, Spain	<i>Sep. 2022</i>
<b>HERA International Workshop 2022</b> Nice, France	<i>May. 2022</i>
<b>EPSC-DPS Joint Meeting 2019</b> Geneva, Switzerland	<i>Sep. 2019</i>
<b>International Symposium on Asteroids and Comets Gravity and Interiors</b>	<i>Dec. 2018</i>

China

## AWARDS

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<b>JSPS Fellowship</b> University of Tokyo	<i>Apr. 2025 – Mar. 2027</i>
<b>ARC-Space Joint Research Program</b> The University of Aizu	<i>Oct. 2024</i>
<b>Early Career Professional and Student bursaries</b> EPSC Meeting 2024	<i>Sep. 2024</i>
<b>Outgoing Mobility Aid For the Academic Year 2023-2024</b> University Côte d’Azur	<i>Jun. 2024</i>
<b>Early Career Researcher Travel Support</b> 4th Workshop on Thermal Models for Planetary Science	<i>Apr. 2023</i>
<b>Early Career Professional and Student bursaries</b> EPSC Meeting 2022	<i>Sep. 2022</i>
<b>Postgraduate Fellowship</b> University of Hong Kong	<i>Sep. 2018 – Aug. 2020</i>
<b>University Scholarship</b> Wuhan University	<i>2017</i>

## PROFESSIONAL SERVICE

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**Dynamics group member** in HEAR space mission team  
**Reviewer** for *Icarus*  
**Reviewer** for the Chinese version of the book *Fundamental Planetary Science: Physics Chemistry and Habitability*

## TEACHING EXPERIENCE

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<b>University of Hong Kong</b> Teaching assistant (supervisor: Man Kit Yip)	<i>Sep. 2018 – Aug. 2020</i>
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## STUDENT MENTORING

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<b>Bonny Y. Wang (Master student)</b> Center for Computational Astrophysics, New York, USA <i>Project: Identifying the gap in the rotation distribution of asteroids by the machine learning method</i>	<i>2023</i>
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## REFERENCES

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**Patrick Michel** (michelp@oca.eu)  
Observatoire de la Côte d’Azur, France  
**Marco Delbo** (delbo@oca.eu)  
Observatoire de la Côte d’Azur, France  
**David Vokrouhlický** (vokrouhl@cesnet.cz)  
Charles University, Czech  
**Douglas N.C. Lin** (lin@ucolick.org)  
UC Santa Cruz, USA