

Wenhan ZHOU

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Keywords: Asteroid dynamics; Small Solar System bodies; Solar system formation

EDUCATION

Observatoire de la Côte d’Azur Nice, France Ph.D. in Astrophysics (supervisor: Patrick Michel)	<i>Jan. 2022— Dec.2024 (expected)</i>
University of Hong Kong Hong Kong, China M.Phil. in Physics (supervisor: Meng Su)	<i>Sep. 2018 – Apr. 2021</i>
Wuhan University Wuhan, China B.Eng. in Engineering	<i>Sep. 2014 - June 2018</i>

VISITING EXPERIENCE

The University of Tokyo (host: Seiji Sugita) Tokyo, Japan	<i>Aug. 2024 - Sep. 2024</i>
Charles University (host: David Vokrouhlický) Prague, Czech Republic	<i>May 2024 - Jun. 2024</i>

PUBLICATIONS (8 first-author papers including 2 sole-author papers)

- Zhou, W. H.**, The binary Yarkovsky effect on the primary asteroid with application to singly synchronous binary asteroids (accepted by *A&A Letters*).
Highlight: Complete the basic theoretical framework of the “Binary Yarkovsky” effect.
- Zhou, W. H.**, Michel, P., Delbo, M., Wang, W., Wang, Y., Durech, J., & Hanus, J., Confined tumbling state as the origin of the excess of slowly rotating asteroids (accepted by *Nature Astronomy*).
Highlight: Explain the observed period-diameter distribution of asteroids; supervised a master student.
- Zhou, W. H.**, Vokrouhlicky, 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.
- 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*.
- 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*.
- Zhou, W. H.**, Zhang, Y., Yan, X., & Michel, P. (2022). The crater-induced YORP effect. *A&A*, **668**, *A70*.
- 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*.
- Zhou, W. H.** (2020). ‘Oumuamua’s Rotation with the Mechanical Torque Produced by Interstellar Medium. *ApJ*, **899**(1), *42*.
- 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*.
- 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*.

CONFERENCES/WORKSHOPS/SEMINARS

Group Seminar Center for Astrophysics, Harvard, the USA	<i>Oct. 2024</i>
EPSC2024 Berlin, Germany	<i>Sep. 2024</i>
Group Seminar National Astronomical Observatory of Japan, Japan	<i>Sep. 2024</i>
Visitor Talk Earth-Life Science Institute, Tokyo Tech, Japan	<i>Sep. 2024</i>

Group seminar Department of Earth and planetary science, UTokyo, Japan	Sep. 2024
Group seminar Department of Space and Planetary Sciences, Sun Yat-Sen University, China	Aug. 2024
Group seminar Department of Earth and space sciences, SUSTech, China	Aug. 2024
Dynamics and physics in the solar system University of Pisa, Pisa, Italy	Jun. 2024
HERA International Workshop 2024 ESTEC, Noordwijk, Netherland	Apr. 2024
Winter School on small bodies in the Solar System Ecole de Physique des Houches, Les Houches, France	Feb. 2024
HERA International Workshop 2023 ESTEC, Noordwijk, Netherland	Oct. 2023
4th Workshop on Thermal Models for Planetary Science ESTEC, Noordwijk, Netherland	Apr. 2023
Workshop on applications of radar instruments in planetary science Beijing, China (online)	Jan. 2023
EPSC Meeting 2022 Granada, Spain	Sep. 2022
HERA International Workshop 2022 Nice, France	May. 2022
EPSC-DPS Joint Meeting 2019 Geneva, Switzerland	Sep. 2019
International Symposium on Asteroids and Comets Gravity and Interiors China	Dec. 2018

AWARDS

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

PROFESSIONAL SERVICE

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

University of Hong Kong Teaching assistant (supervisor: Man Kit Yip)	Sep. 2018 – Aug. 2020
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STUDENT MENTORING

Bonny Y. Wang (Master student) Carnegie Mellon University; Center for Computational Astrophysics <i>Project: Identifying the gap in the rotation distribution of asteroids by the machine learning method</i>	2023
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