

Wenhan ZHOU

Observatoire de la Côte d’Azur, Nice, France
ORCID: <https://orcid.org/0000-0003-4229-8936>
Homepage: <http://wh-zhou.github.io>

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.**, 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.**, The binary Yarkovsky effect on the primary asteroid with application to singly synchronous binary asteroids. *A&AL*, **692**, *L2*.
Highlight: Complete the basic theoretical framework of the “Binary Yarkovsky” effect.
- Zhou, W. H.**, Vokrouhlický, 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	<i>Sep. 2024</i>
Group seminar Department of Space and Planetary Sciences, Sun Yat-Sen University, China	<i>Aug. 2024</i>
Group seminar Department of Earth and space sciences, SUSTech, China	<i>Aug. 2024</i>
Dynamics and physics in the solar system University of Pisa, Pisa, Italy	<i>Jun. 2024</i>
HERA International Workshop 2024 ESTEC, Noordwijk, Netherland	<i>Apr. 2024</i>
Winter School on small bodies in the Solar System Ecole de Physique des Houches, Les Houches, France	<i>Feb. 2024</i>
HERA International Workshop 2023 ESTEC, Noordwijk, Netherland	<i>Oct. 2023</i>
4th Workshop on Thermal Models for Planetary Science ESTEC, Noordwijk, Netherland	<i>Apr. 2023</i>
Workshop on applications of radar instruments in planetary science Beijing, China (online)	<i>Jan. 2023</i>
EPSC Meeting 2022 Granada, Spain	<i>Sep. 2022</i>
HERA International Workshop 2022 Nice, France	<i>May. 2022</i>
EPSC-DPS Joint Meeting 2019 Geneva, Switzerland	<i>Sep. 2019</i>
International Symposium on Asteroids and Comets Gravity and Interiors China	<i>Dec. 2018</i>

AWARDS

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

PROFESSIONAL SERVICE

Dynamics group member in HERA 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)	<i>Sep. 2018 – Aug. 2020</i>
--	------------------------------

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>	<i>2023</i>
--	-------------