

# 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

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

## VISITING EXPERIENCE

<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>

## 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 (under revision in *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

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

## AWARDS

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

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

<b>Bonny Y. Wang (Master student)</b> 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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