

Wenhan ZHOU

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EDUCATION

Université de la Côte d'Azur, Observatoire de la Côte d'Azur	Nice, France
Ph.D. in Astrophysics (supervisor: Patrick Michel)	Dec. 2024 (expected)
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 Energy and Power Engineering	Sep. 2014 - June 2018

EXPERIENCE

The University of Tokyo	Tokyo, Japan
Visiting scholar (host: Seiji Sugita)	Aug. 2024 - Sep. 2024
Charles University	Prague, Czech Republic
Visiting scholar (host: David Vokrouhlický)	May 2024 - Jun. 2024
Origin Space Ltd.	Beijing, China
Research assistant (supervisor: Meng Su)	Jun. 2021 - Dec. 2021
University of Hong Kong	Hong Kong, China
Teaching assistant (supervisor: Man Kit Yip)	Sep. 2018 – Aug. 2020

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

1. **Zhou, W. H.**, The binary Yarkovsky effect on the primary asteroid with application to singly synchronous binary asteroids (submitted).
2. **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.
3. **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. *Astrophysical Journal Letters*, 968, L3.
Highlight: Discover a new physical mechanism on the long term dynamics of binary asteroid systems.
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. *Astronomy & Astrophysics*, 687, A107.
5. **Zhou, W. H.**, & Michel, P. (2024). A semi-analytical thermal model for craters with application to the crater-induced YORP effect. *Astronomy & Astrophysics*, 682, A130.
6. **Zhou, W. H.**, Zhang, Y., Yan, X., & Michel, P. (2022). The crater-induced YORP effect. *Astronomy & Astrophysics*, 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. *Astronomy & Astrophysics*, 667, A108.

8. **Zhou, W. H.** (2020). ‘Oumuamua’s Rotation with the Mechanical Torque Produced by Interstellar Medium. *The Astrophysical Journal*, 899(1), 42.
9. 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. *Astronomy & Astrophysics*, 672, A114.

CONFERENCES/WORKSHOPS

Dynamics and physics in the solar system	<i>Jun. 2024</i>
University of Pisa, Pisa, Italy	
➤ Oral presentation: The Yarkovsky effect on binary asteroids.	
HERA International Workshop 2024	<i>Apr. 2024</i>
ESTEC, Noordwijk, Netherland	
Winter School on small bodies in the Solar System	<i>Feb. 2024</i>
Ecole de Physique des Houches, Les Houches, France	
HERA International Workshop 2023	<i>Oct. 2023</i>
ESTEC, Noordwijk, Netherland	
4th Workshop on Thermal Models for Planetary Science	<i>Apr. 2023</i>
ESTEC, Noordwijk, Netherland	
➤ Oral presentation: A Semi-analytical Thermal Model for Craters with Application to the Crater-induced YORP Effect.	
Workshop on applications of radar instruments in planetary science	<i>Jan. 2023</i>
Beijing, China (online)	
➤ Oral presentation: The YORP and Yarkovsky effects in Solar system asteroids.	
EPSC Meeting 2022	<i>Sep. 2022</i>
Granada, Spain	
➤ Oral presentation: The crater-induced YORP effect.	
HERA International Workshop 2022	<i>May. 2022</i>
Nice, France	
EPSC-DPS Joint Meeting 2019	<i>Sep. 2019</i>
Geneva, Switzerland	
➤ Poster: Interstellar Object Rotation with the Mechanical Torque Produced by Interstellar Medium	
International Symposium on Asteroids and Comets Gravity and Interiors	<i>Dec. 2018</i>
China	
➤ Oral presentation: Discovery of Interstellar Object ‘Oumuamua and Future Astronomical Detection	

AWARDS

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

STUDENT SUPERVISION

Bonny Y. Wang (Master student) 2023

Carnegie Mellon University; Center for Computational Astrophysics

Identifying the gap in the rotation distribution of asteroids by a semi-supervised machine learning method

References

Patrick Michel (michelp@oca.eu)

Observatoire de la Côte d'Azur

Marco Delbo (delbo@oca.eu)

Observatoire de la Côte d'Azur

Douglas N.C. Lin (dnlin@ucsc.edu)

University of California, Santa Cruz

David Vokrouhlický (vokrouhl@cesnet.cz)

Charles University