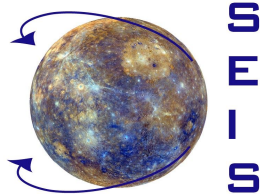


Surface and Environment Interaction Studies (SEIS)



Latest news

- The **next online SEIS meetings** are on **October 1st** and on **December 3th**
- The **next Newsletter** will be released in **March 2025**
- Stay tuned to discover our **new SEIS (Co-)Chairs**

New SEIS (Co-)Chairs



Aurélie Van den Neucker (aurelie.vandenneucker@dlr.de)

PhD candidate at the German Aerospace Center (DLR)



Autumn Shackelford (Autumn.Shackelford@ucf.edu)

PhD candidate at the University of Central Florida



Nimisha Verma (nimisha.verma@dlr.de)

PhD candidate at the German Aerospace Center (DLR)

Feel free to contact
us for any
question/suggestion

Highlights June (in-person) meeting Fukuoka

Mentor-Mentee Coffee Talk:

Senior Scientists and Early-Careers were able to get together over some coffee cookies, to talk about Mercury science without boundaries.

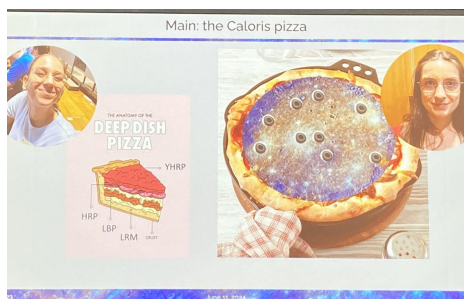
Thank you to all mentors and mentees!



Funny Contest:

A light-hearted Mercury themed contest. Four teams revealed their artistic side, and showed that Mercury is present not only in science but also in our daily life:

Thank you to the “Freddie Mercury”, “Your Holiday on Mercury”, “The Mercury dinner, a sensory experience” and “Mercury cars” teams



BepiColombo Mercury Laboratory Workshop 2024

September 16-18, Berlin (Germany)

The workshop aims to bring together the Mercury community from different institutions and laboratories

<https://www.cosmos.esa.int/web/bepicolombo-mercury-lab-workshop/home>



Publications

Caminiti, E., Lantz, C., Besse, S., Brunetto, R., Carli, C., et al. (2024). Effects of ion irradiation on Mercury terrestrial analogues in the visible to mid-infrared. *Icarus*, 420, 116191.

<https://doi.org/10.1016/j.icarus.2024.116191>

Exner, W., Griton, L. S., & Heyner, D. (2024). Determining the Influence of the IMF and Planetary Magnetic Field Models on Mercury's Magnetosphere Along Spacecraft Trajectories of MESSENGER, BepiColombo and MPO. *Journal of Geophysical Research (Space Physics)*, 129, e2023JA032248.

<https://doi.org/10.1029/2023JA032248>

Jäggi, N., Biber, H., Brötzner, J., Szabo, P. S., Mutzke, A., Gasser, J., Aumayr, F., Wurz, P., & Galli, A. (2024). SpuBase: Solar Wind Ion Sputter Database for Modeling Purposes. *The Planetary Science Journal*, 5, 75.

<https://doi.org/10.3847/PSJ/ad2993>

Pump, K., Heyner, D., Schmid, D., Exner, W., & Plaschke, F. (2024). Revised Magnetospheric Model Reveals Signatures of Field-Aligned Current Systems at Mercury. *Journal of Geophysical Research (Space Physics)*, 129, e2023JA031529. <https://doi.org/10.1029/2023JA031529>.

Rojo, M., Persson, M., Sauvaud, J.-A., Aizawa, S., Nicolaou, G., Penou, E., et al. (2024). Electron moments derived from the Mercury Electron Analyzer during the cruise phase of BepiColombo. *Astronomy and Astrophysics*, 683, A99. <https://doi.org/10.1051/0004-6361/202347843>.

Sun, W., Dewey, R. M., Jia, X., Raines, J. M., Slavin, J. A., et al. (2024). MESSENGER Observations of Mercury's Planetary Ion Escape Rates and Their Dependence on True Anomaly Angle. *Geophysical Research Letters*, 51, e2023GL107689. <https://doi.org/10.1029/2023GL107689>.

Teubenbacher, D., Exner, W., Feyerabend, M., Narita, Y., Schmid, D., et al. (2024). Solar wind entry into Mercury's magnetosphere: Simulation results for the second swingby of BepiColombo. *Astronomy and Astrophysics*, 681, A98. <https://doi.org/10.1051/0004-6361/202347789>.

Wang, Y., Yang, F., Shen, C., Yang, J., Hu, X., & Fei, Y. (2024). Electrical Resistivity and Phase Evolution of Fe–N Binary System at High Pressure and High Temperature. *Minerals*, 14, 467. <https://doi.org/10.3390/min14050467>.

Zhong, J., Xie, L., Lee, L.-C., Slavin, J. A., Raines, J. M., Dewey, R. M., Ip, W.-H., Saito, Y., & Wei, Y. (2024). North-South Plasma Asymmetry Across Mercury's Near-Tail Current Sheet. *Geophysical Research Letters*, 51, e2023GL106266. <https://doi.org/10.1029/2023GL106266>.

SEIS WEBSITE: <https://www.cosmos.esa.int/web/bepicolombo-yssg-seis/home>

Join SEIS team by doing the two steps:

- Registering to cosmos YSSG website
<https://www.cosmos.esa.int/web/bepicolombo-yssg/membership>
- Registered in the member list
<https://docs.google.com/spreadsheets/d/1S-an5jG3nIHkFUxD9Q4PIU-BOxyVCGEAI4BY2nBq0iY/edit?usp=sharing>

Joining SEIS slack workspace:

<https://bepiyswg-surf-envi-sg.slack.com/>



 slack