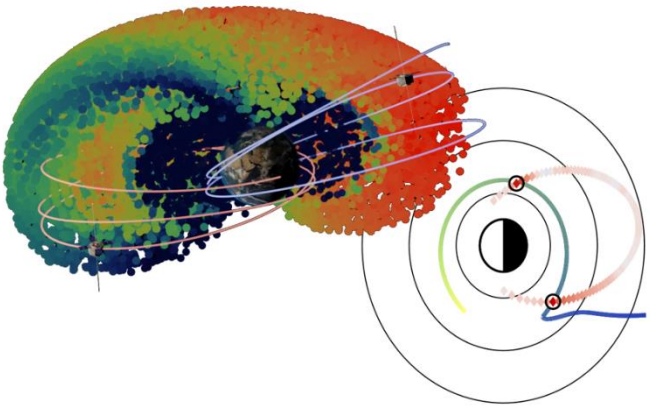
Workshop Announcement

Unravelling the mystery of Earth's space radiation environment loss processes



Dear colleagues from the Geo.X network,

We would like to cordially invite you to join us in a one-day research workshop titled "Unravelling the mystery of Earth's space radiation environment loss processes" hosted at GFZ on **Friday, September 27, 2024**. This workshop is a follow-up meeting to the workshop we held in early June this year.

Please write a short email to bhaas@gfz-potsdam.de **to register for the workshop. Please note that we can host only a limited number of participants.**

The main organizers of the workshop are Bernhard Haas (GFZ Potsdam), Katja Stoll (DLR Neustrelitz), and Wei Wang (Universität Potsdam).

This workshop is financially supported by Geo.X – The Research Network for Geosciences in Berlin and Potsdam, as part of the call "Grow Your Idea! – Developing new collaborative research in geo- and planetary science using existing competencies in the Geo.X network". For further Information see https://www.geo-x.net/get-involved/grow-your-idea/.

Workshop summary:

Recent studies have revealed a lack of understanding regarding the precipitation of energetic electrons from the ring current and radiation belts in the near-Earth space environment. Although missing loss terms have been proposed to resolve the discrepancies between models and observations, the underlying physics of these loss terms remains a mystery. This workshop aims to bring together experts and early career scientists from various fields and institutions to discuss these missing physical mechanisms and explore how they could be unravelled in the future. The discussed topics will include the scattering of electrons due to Chorus waves, kinetic Alvén waves, and electron holes.