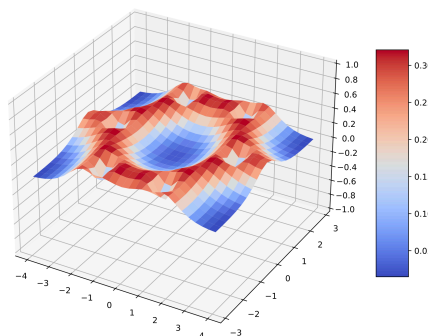
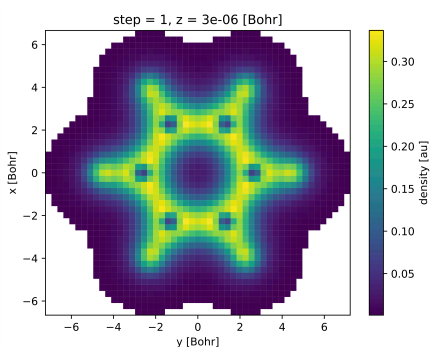


# Are you looking for **Master's project** involving software development?

A copy of this advert is available online at <https://s.gwdg.de/ukkpqF> (or use QR code).

We are looking for students with interest in programming, data analysis & visualisation, and software engineering who want to do their Masters project with us (Einarbeitungsprojekt, Vorbereitungsprojekt, Master-Arbeit).

- Task: contribute to data analysis framework for 3d and 4d physics simulation results
- Expectations:
  - programming skills and interest/desire to improve those
  - Python experience, knowledge of any of the tools listed below is useful
  - Interest in (supporting) materials research in physics
- Likely tools you will be using include:
  - git, Python, pytest, Jupyter notebooks, numpy & xarray, scipy & pandas, matplotlib & holoviews, PyVista
- Things you will learn include:
  - the tools listed above, modern data analysis for science, research software engineering, testing, continuous integration, GitLab/GitHub
- More context: The ab-initio simulation package octopus (<https://octopus-code.org/>) writes a variety of data files to disk. In this project, you will work on "postopus": a Python package to make data analysis of these files easier (POSTprocessing of OctoPUS data). A prototype is available at <https://gitlab.com/octopus-code/postopus> .
- Interested? Related interests?  
Get in touch with [Hans Fangohr](mailto:hans.fangohr@mpsd.mpg.de) ([hans.fangohr@mpsd.mpg.de](mailto:hans.fangohr@mpsd.mpg.de)) for informal enquiries.



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