Developing Octopus:
Summary

Martin Lüders and the Octopus developers

Octopus Advanced Course 2023, MPSD Hamburg

Development: Summary

- Try to write code of good quality:
  - Follow the guidelines
  - Provide doxygen documentation, including formulas and references if applicable
  - Add other comments to structure the code
- If possible. provide validation for your code
- Add a test, if applicable a unit test
- For new features, provide a tutorial
  could be scaled down version of your research application.

Development: Support and getting help

Core development team:

- Research Software Engineers
  - Based in Hamburg: Alex and Martin
  - Based at MPCDF: Sebastian plus 2 new recruits
  - Tasks:
    - Support new developments
    - Optimizations and code maintenance
    - Training and mentoring
    - long term planning
- other senior developers: Nicolas, Micael, Heiko, Franco
  - long term planning of the code
  - deep understanding of te code

How to interact:

- Sign up to octopus-developers mailing list.
- Join our meetings Tuesday morning in the Octopus forum.
- Just drop by or write an email

Development: Mentoring

Mentoring scheme:

- New developers should pair up with core developers
- Core developer will be involved from early stages of the project
  - Plan the implementation
  - Teach necessary programming techniques
  - Provide guidance and support to ensure good code quality
- Provide support with MPI and GPU implementations
- Code review from another core developer