

OpenDreamKit

Southampton site report

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Tasks led by Southampton

- completed T3.8 *Python interface for OOMMF micromagnetic library*
- started T4.11 *Case study: micromagnetic VRE built from OpenDreamKit*
- started T2.7 *Open source dissemination of micromagnetic VRE*

T3.8 Python interface for OOMMF (complete)

- project webpage: <https://joommf.github.io>
- code at <https://github.com/joommf/oommfc>
- good test coverage (codecov.io)
- continuous integration (travis-ci.org)
- documentation (readthedocs.io)
- more details in talk Friday morning

build passing docs latest pypi package 0.6

codecov 96%

- T3.8 Python interface for OOMMF presented in talk to target audience at the largest annual international magnetism conference in New Orleans, LA, USA, November 2016.
 - Audience of 60 people
- Publication summarising T3.8 accepted in AIP Advances (publication early 2017):
User interfaces for computational science: a domain specific language for OOMMF embedded in Python
Preprint: <https://arxiv.org/abs/1609.07432>

- Two workshops at the International conference on Magnetism and Magnetic Materials
 - 2nd and 3rd November 2016
 - 9 participants from 6 countries (2 women)
 - presented Python interface for OOMMF in more details
 - obtained feedback and requests from the community
- Talk at the OpenScience conference in Ljubljana, Slovenia, 17 November 2016

Nothing to report.

- Integration of micromagnetic interface into Jupyter Notebook
- Dissemination activities
 - Invited tutorial talk at March meeting of Deutsche Physikalische Gesellschaft (DPG), Dresden, Germany, March 2017
 - Invited Workshop at the UK Institute of Physics Magnetism conference, York, UK, April 2017
 - Workshop at the International Intermag conference, Dublin, Ireland, April 2017