

OpenDreamKit

Southampton site report June 2016

Marijan Beg, Hans Fangohr

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- We had a significant delay in the recruitment process for the Research Fellow position at Southampton.
 - top ranked candidate (Marijan Beg) is a Croatian citizen
 - additional paperwork as Croatia joined the EU recently
 - anticipated Brexit referendum increased pressure on UK Home Office (applied for worker authorisation certificate)
 - overall delay about 5 months
 - Marijan Beg took up post on 19 April 2016.
- Now just over 2 months into the project

Proposed and approved changes: delay by 4 months

- We asked for the following changes in the project timings:
 - T2.7 (M24-M28 → M28-M32)
 - T2.8 (M14-M40 → M18-M44)
 - T2.9 (M0-M36; M40-M46 → M0-M46)
 - T3.8 (M3-M9 → M7-M13)
 - T4.11 (M9-M15 → M13-M25)
 - T4.13 (M15-M21 → M19-M25)
 - T4.14 (M21-M24 → M25-M28)
 - T7.4 (M28-M40 → M32-M44)
 - D2.13 (M44 → M48)
- No other tasks and deliverables affected

- Marijan Beg (research fellow)
 - Electrical Engineer
 - PhD in computational physics and magnetism
- Ryan Pepper (PhD student, associated)
 - Physicist from Birmingham University
 - PhD student in EPSRC CDT in Next Generation Computational Modelling
- Hans Fangohr (investigator)

- report from finance team completed
- not aware of any issues (apart from Brexit)

Overview achievements

- Project webpages at <http://joommf.github.io>
- Presentation of OpenDreamKit and Jupyter-OOMMF (JOOMMF) project at largest international magnetism meeting in San Diego, CA, US (Jan 2016):

<http://opendreamkit.org/activities/2016-01-12-joommf-talk-MMM2016/>

- Meeting with OOMMF core developers (Jan 2016)
- Jupyter-OOMMF project <http://github.com/joommf>
 - Jupyter Notebook
 - OOMMF: Object Oriented MicroMagnetic Framework
 - First steps towards Python OOMMF interface

<https://github.com/joommf/oommfc>

- Presentation and publication on Software Engineering for computational science (ICSE, Austin, Texas (US), May 2016)

<http://arxiv.org/abs/1601.07392>

- T3.8: Python Interface for OOMMF micromagnetic simulation
<https://github.com/OpenDreamKit/OpenDreamKit/issues/57>
 - Initial exploration of Python-OOMMF interface options
<https://github.com/fangohr/oommf-python>
 - A number of refined Python-based tools for computational micromagnetics are under development, code at <http://github.com/joommf/>
 - good test coverage (codecov.io)
 - continuous integration (travis-ci.org)
 - documentation (readthedocs.io)
 - Months 7 – 13 (now in month 10)