

FOSS for Scientists devroom

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FOSDEM '13

Free and Open Source Developers' European Meeting
Brussels, February 2nd 2013

background

- Sylwester
- ▶ @ Faculty of Physics, University of Warsaw
 - ▶ numerical modelling of clouds and precipitation
 - ▶ <http://www.igf.fuw.edu.pl/~slyoo/>

- Juan
- ▶ @ University of Oxford (Climateprediction.net)
 - ▶ numerical modelling of Earth's climate
 - ▶ <http://aanel.org/>

- Christos
- ▶ @ Institut d'Astronomie et d'Astrophysique, ULB
 - ▶ space astrometry, galactic dynamics
 - ▶ <http://www.astro.ulb.ac.be/~csiopis/>

we use, develop and advocate FOSS both at work and in free time

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motivation

- ▶ There is an "unacknowledged convergence of open source, open access, and open science"^a
- ▶ FOSS constitutes a significant part of software used by scientists
- ▶ scientific software constitutes a notable part of FOSS projects
- ▶ FOSS development practices such as code review and public code repositories are arguably indispensable to comply with the scientific method^b and to pursue truly reproducible research^c
- ▶ these topics have not attracted much attention at FOSDEM's before

^aWillinsky, 2005: "The unacknowledged convergence of open source, open access, and open science". First Monday 10(8), firstmonday.org

^bAñel, 2011: "The importance of reviewing the code". doi: 10.1145/1941487.1941502

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agenda (1/2 - before lunch)

- 11:10 Debian Med Andreas Tille
- 11:30 Orthanc Sébastien Jodogne
- 11:50 AMEBA René Rex
- 12:10 Packaging mass spectrometry software in Debian Filippo Rusconi
- 12:30 The Open Chemistry Project Marcus D. Hanwell
- 12:50 ZIO: a framework for high capacity I/O
..... Federico Vaga, Alessandro Rubini
- 13:10 How to mature a 20 years old Scotch François Pellegrini
- 13:30 G'MIC (GREYC's Magic Image Converter) .. David Tschumperlé
- 13:50 Mezurit 2 Brian Standley
- 14:10 odeint - Solving ODEs in C++ Mario Mulansky
- 14:30 Solving ODEs with Cuda/OpenCL Karsten Ahnert
- 14:50 Scilab: from research to the industry Sylvestre Ledru

agenda (2/2 - after lunch)

- 16:00 Apache Commons Math Thomas Neidhart, Gilles Sadowski
- 16:20 High performance streaming data processing ... Folkert Huizinga
- 16:40 Automated detection and classification of transients.....
in the radio spectrum Gijs Molenaar
- 17:00 EasyBuild Jens Timmerman, Kenneth Hoste
- 17:20 Make free science free Juan Julián Merelo
- 17:40 OpenMOLE Romain Reuillon, Mathieu Leclaire
- 18:00 ClimatePrediction.net Juan A. Añel
- 18:20 Software as Science Nicolas Limare
-
- 18:40 Open Discussion Christos Siopis

timing

15 min – talk

4 min – questions

1 min – seat occupancy optimisation

misc

Open Science, Open Software, and Reproducible Code

a marriage of FOSS and Science

main-track talk by [Bill Hoffman](#)
tomorrow at 15:00 in K.1.105

Thanks! and let's start