

Everware toolkit

**supporting reproducible science and
challenge-driven education**

Tim Head, Igor Babuschkin³, Alexander Tiunov²,
Andrey Ustyuzhanin^{1,2}

2016-10-11, CHEP

¹Yandex School of Data Analysis, ²Higher School of Economics NRU,
³University of Manchester



everware / everware-dimuon-example

Watch 9 Star 3

- Code
- Issues 0
- Pull requests 0
- Projects 0
- Pulse
- Graphs

<https://github.com/everware/everware-dimuon-example/blob/master/jpsi.ipynb>

19 commits 1 branch 0 releases 3 contributors

Branch: **master**

Commit	Message	Time
anaderi added badge		Latest commit 73505
<code>.dockerignore</code>	finish example	
<code>.gitignore</code>	begin everware example: measuring the mass of the J/psi meson	
<code>Dockerfile</code>	moved deps into rep-base image	11 m
<code>README.md</code>	added badge	4 m
<code>jpsi.ipynb</code>	revert to standard notebook (no slides)	

`README.md`

Everware is ...

... about re-usable science, it allows people to jump right into your research code. Lets you launch *Jupyter* notebooks from a git repository with a click of a button.

- › <https://github.com/everware>
- › <https://everware.rep.school.yandex.net> (Yandex instance)

Examples:

- › algorithm meta-analysis, https://github.com/openml/study_example
- › gravitational waves, <https://github.com/anaderi/GW150914>
- › COMET, <https://github.com/yandexdataschool/comet-example-ci>

How it works:

- › **resources**: wherever *everware* is installed (Yandex)
- › **data**: CERNBOX
- › **environment** management:
 - › conda or virtualenv
 - › docker
- › github: analysis **code** versioning
- › Jupyter(Hub): runs the code interactively (a-la **workflow**)
- › continuous integration: intermediate **results checks** & report

Highlights

- › Reproducibility is not easy, but possible;
- › everware *works* for research and education
- › easy to [try](#);
 - › WIP, <https://github.com/everware> (open-source, care to join?);
 - › feature requests are welcome
 - › pull requests are most welcome
 - › See [talk on LHCb open data masterclass](#) for an extensive example.

