Everware toolkit

supporting reproducible science and challenge-driven education

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

- `.dockerignore`: finish example
- `.gitignore`: begin everware example: measuring the mass of the J/ψ meson
- `Dockerfile`: moved deps into rep-base image
- `README.md`: added badge
- `jpsi.ipynb`: revert to standard notebook (no slides)
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://github.com/everware)
- [https://everware.rep.school.yandex.net](https://everware.rep.school.yandex.net) (Yandex instance)

Examples:

- algorithm meta-analysis, [https://github.com/openml/study_example](https://github.com/openml/study_example)
- gravitational waves, [https://github.com/anaderi/GW150914](https://github.com/anaderi/GW150914)
- COMET, [https://github.com/yandexdataschool/comet-example-ci](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.