

“NO RESULT OF THE
LABORATORY’S
ACTIVITIES WHICH
IS OF THEORETICAL
OR PRACTICAL
IMPORTANCE SHALL
BE KEPT SECRET.”

The problem and the solution

- Too much data is lost
- There is no access
- Not reproducible

- The solution: Open Science



But what exactly is Open Science?

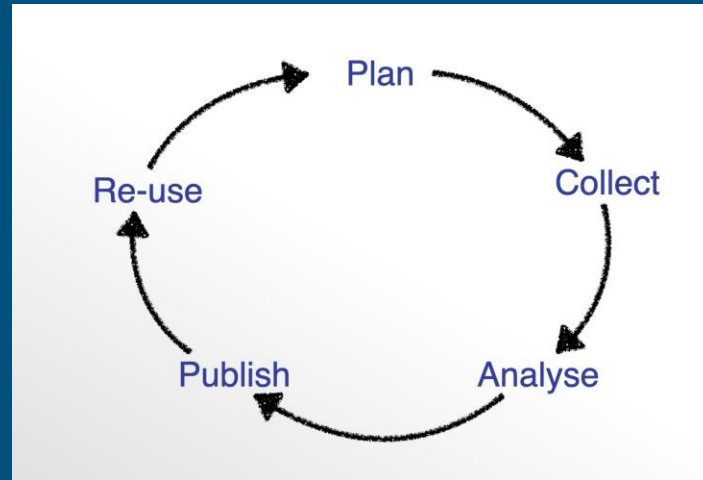


—

Open Science

- Knowledge should be free with unhindered access
- Easy for all parties involved

Research cycle:



How does Open Science function in practice?

What have we been doing for
the past 2 weeks



Terminal commands

- Get familiar with navigating
- Different interface to our computer

```
joep0@LAPTOP-3KU339S4 MINGW64 ~
$ cd Desktop

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop
$ mkdir Presentation

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop
$ cd Presentation

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ nano croissant.txt

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ cat croissant.txt
This is a croissant

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ ls
croissant.txt

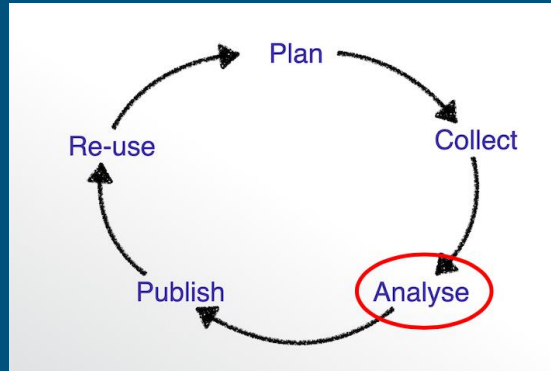
joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ mkdir removal

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ ls
croissant.txt  removal/

joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ rm -r removal

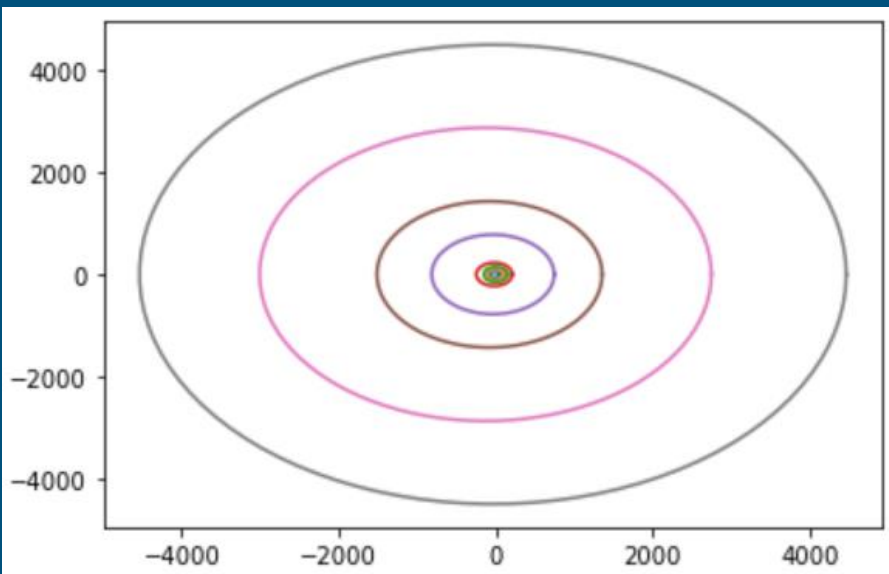
joep0@LAPTOP-3KU339S4 MINGW64 ~/Desktop/Presentation
$ ls
croissant.txt
```

Analyse



Python

- Rewriting in programming language



```
import pandas as pd

import numpy as np

from matplotlib import pyplot as plt

data = pd.read_csv('data/mydata.csv')

for i in range(0, 8):

    a = data.a[i]

    xcen = data.perihelion[i] - a

    ycen = 0

    b = data.b[i]

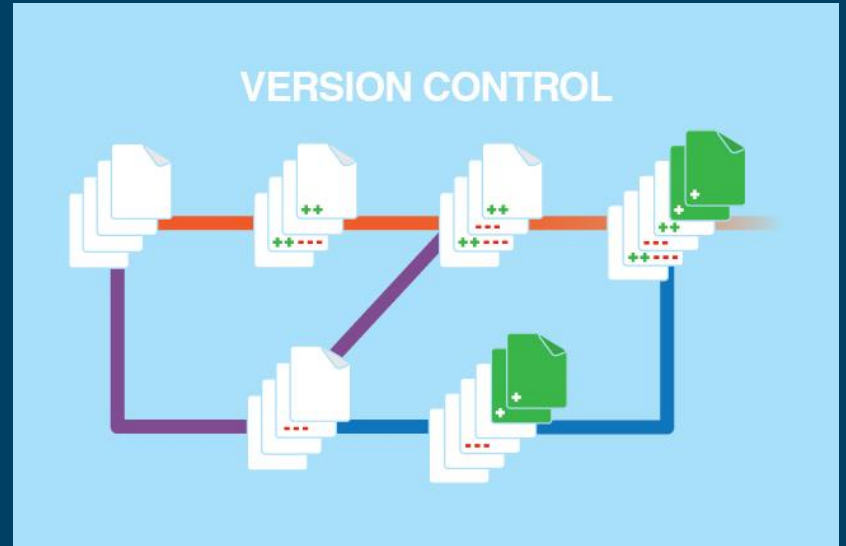
    t = np.linspace(0, 2*np.pi, 100)

    plt.plot(xcen + a * np.cos(t), ycen + b * np.sin(t))

    plt.grid(color = "black", linestyle = "--")

plt.savefig("plot.png")
```


Ever heard of
version control?



Github

- Share the new project to a shared workspace

The screenshot shows the GitHub interface for a repository named 'Kattrunte / Pastabridge'. The repository is public and was generated from 'zzacharo/reana-notebook-skeleton'. It has 1 fork, 0 stars, and 1 watch. The repository is currently on the 'master' branch with 1 branch and 0 tags. The file list shows a commit by 'Kattrunte' 7 hours ago with 11 commits. The files listed are 'code', 'data', '.gitignore', 'Bridge-above.png', 'Bridge-side.png', 'LICENSE', and 'README.md'. The 'About' section is empty, and the 'Releases' section shows no releases published.

Search or jump to... / Pull requests Issues Marketplace Explore

Kattrunte / Pastabridge Public

generated from zzacharo/reana-notebook-skeleton

Unwatch 1 Star 0 Fork 1

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags

Go to file Add file Code

Kattrunte added picturs 4787767 7 hours ago 11 commits

code	The README file is up to date	7 hours ago
data	Chenges from varibels to data in file so it can changes	yesterday
.gitignore	Initial commit	2 days ago
Bridge-above.png	The README file is up to date	7 hours ago
Bridge-side.png	The README file is up to date	7 hours ago
LICENSE	The README file is up to date	7 hours ago
README.md	added picturs	7 hours ago

About

No description, website, or topics provided.

Readme

MIT License

Releases

No releases published

Create a new release

Reana

reana

Help



✓ my-workflow2 #1
Finished a day ago

finished in 25 seconds
step 1/1

> Logs Workspace Specification

Step

reana-run-job-ebd9b408-c373-47a4-969c-
a37c54b5b072

finished

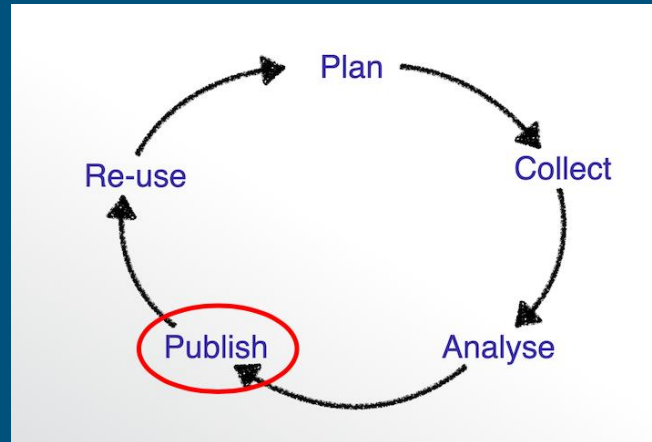
Kubernetes

reanahub/reana-env-jupyter:2...

\$ mkdir -p results && papermill code/myp...

```
job: :
  Input Notebook: code/myproject.ipynb
  Output Notebook: /dev/null
  Generating grammar tables from /usr/local/lib/python3.6/site-packages/blib2to3/Grammar.txt
  Writing grammar tables to /.cache/black/21.7b0/Grammar3.6.8.final.0.pickle
  Generating grammar tables from /usr/local/lib/python3.6/site-packages/blib2to3/PatternGrammar.txt
  Writing grammar tables to /.cache/black/21.7b0/PatternGrammar3.6.8.final.0.pickle
  Input notebook does not contain a cell with tag 'parameters'
  Executing: 0%|          | 0/8 [00:00<?, ?cell/s]/usr/local/lib/python3.6/site-packages/IPython/paths.py:67: UserWarning:
  IPython parent '/' is not a writable location, using a temp directory.
    " using a temp directory.".format(parent))
  /usr/local/lib/python3.6/site-packages/papermill/iorw.py:120: UserWarning: the file is not specified with any extension : null
    "the file is not specified with any extension : " + os.path.basename(path)
  /usr/local/lib/python3.6/site-packages/IPython/paths.py:67: UserWarning: IPython parent '/' is not a writable location, using a
  temp directory.
    " using a temp directory.".format(parent))
```

Publish



Zenodo

Upload type required ▼

Publication Poster Presentation Dataset Image Video/Audio Software Lesson Physical object Other

Publication type ▼
Publication type.

Basic information required ▼

Digital Object Identifier
Optional. Did your publisher already assign a DOI to your upload? If not, leave the field empty and we will register a new DOI for you. A DOI allows others to easily and unambiguously cite your upload. Please note that it is NOT possible to edit a Zenodo DOI once it has been registered by us, while it is always possible to edit a custom DOI.

Publication date *
Required. Format: YYYY-MM-DD. In case your upload was already published elsewhere, please use the date of first publication.

Title *
Required.

Authors * ▼ ×
Optional.

[+ Add another author](#)

Description *

Publication date:

October 1, 2020

DOI:

DOI [10.5281/zenodo.5537904](https://doi.org/10.5281/zenodo.5537904)

Related identifiers:

Supplement to

<https://github.com/huggingface/transformers/tree/v4.11.1>

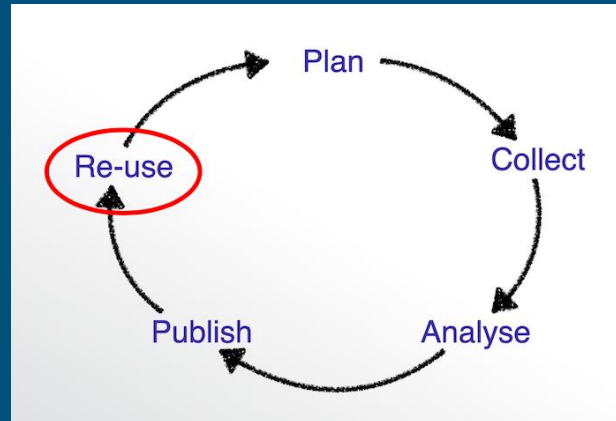
Communities:

[Zenodo](#)

License (for files):

[Other \(Open\)](#)

Re-use



Sooo... What's
the point of this?



Why Open Science?

- **Key messages:**
 - Science builds science
 - Access for everyone
 - Transparency of science
 - Benefits for you
 - No data-loss
 - Save time
 - Job opportunities




```
def learnMore (wantToLearnMore):  
    if (wantToLearnMore == True):  
        answer = "Go to https://swcarpentry.github.io/shell-novice/"  
    else :  
        answer = "Go on, be ignorant!"  
    return (answer)
```