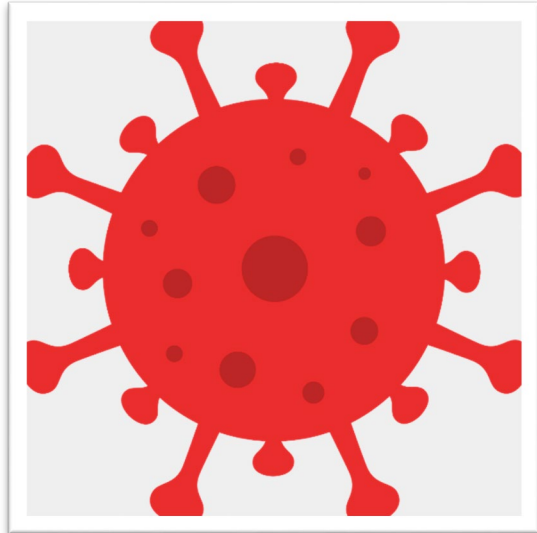


# Reproduzierbarkeit

## Viele kleine Schritte zu einem großen Ziel

Bernadette Fritsch

Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und  
Meeresforschung Bremerhaven  
Computing and Data Center



<https://pixabay.com/de/vectors/coronavirus-symbol-corona-virus-5107715/>



<https://www.flickr.com/photos/140988606@N08/44244851400>

Reproducibility is the ability to recalculate a figure from data, parameters and programs  
(Schwab M, et al., 2000)

Reproducibility is the ability of independent investigators to draw the same conclusions from an experiment by following the documentation shared by the original investigators.  
(Gundersen, O.E., 2021)

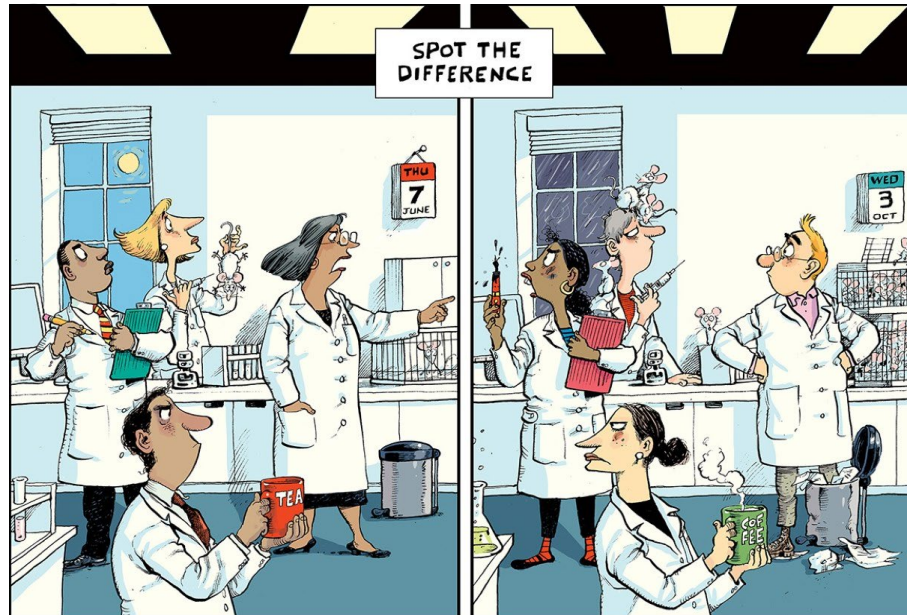
- Repeatability (same team, same experimental setup)
  - Replicability (different team, same experimental setup)
  - Reproducibility (different team, different experimental setup)
- (ACM, 2016, <https://www.acm.org/publications/policies/artifact-review-badging>)

COMMENT | 21 July 2020

## The best time to argue about what a replication means? Before you do it

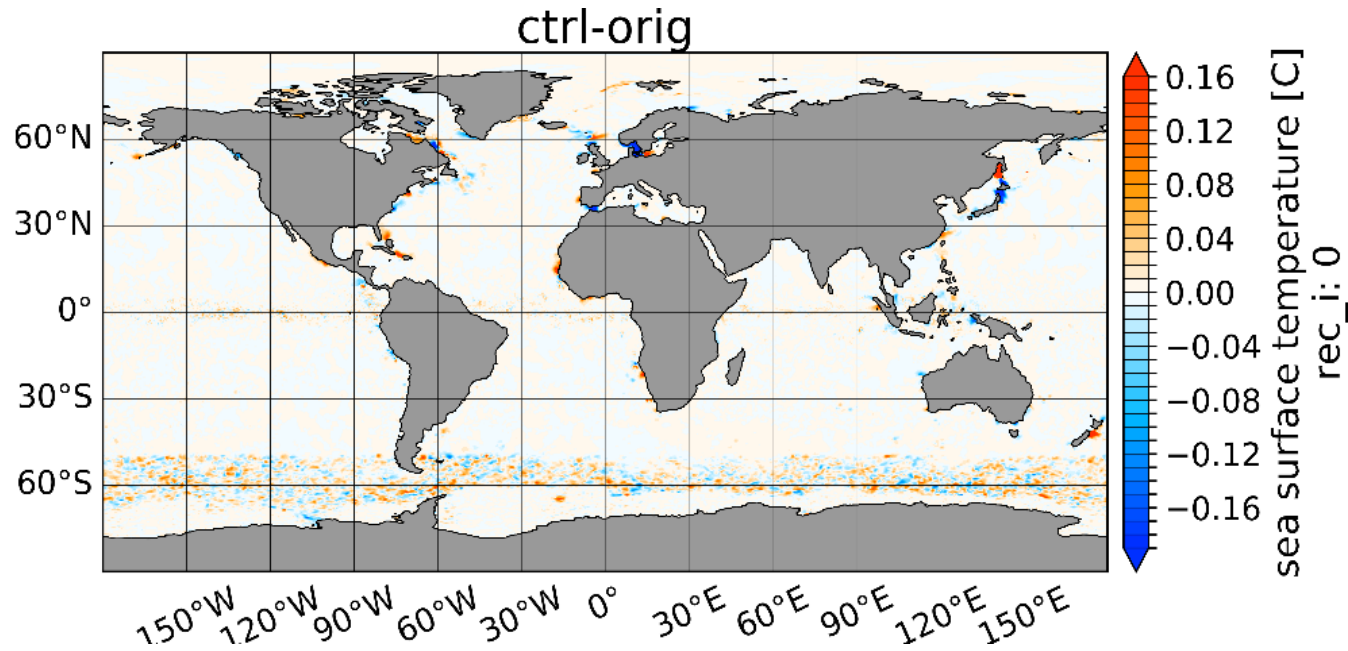
To avoid stalemates and provide lessons, replicators and original researchers must reach agreement on a study design and set out expectations ahead of time.

Brian A. Nosek  & Timothy M. Errington 



Aus: <https://www.nature.com/articles/d41586-020-02142-6>

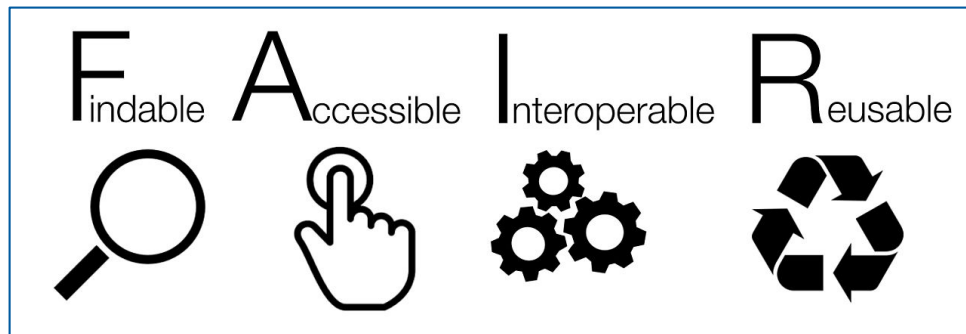
B. Fritsch – RDA-DE 24.02.2022



<https://github.com/FESOM/fesom2/issues/145>, P. Scholz

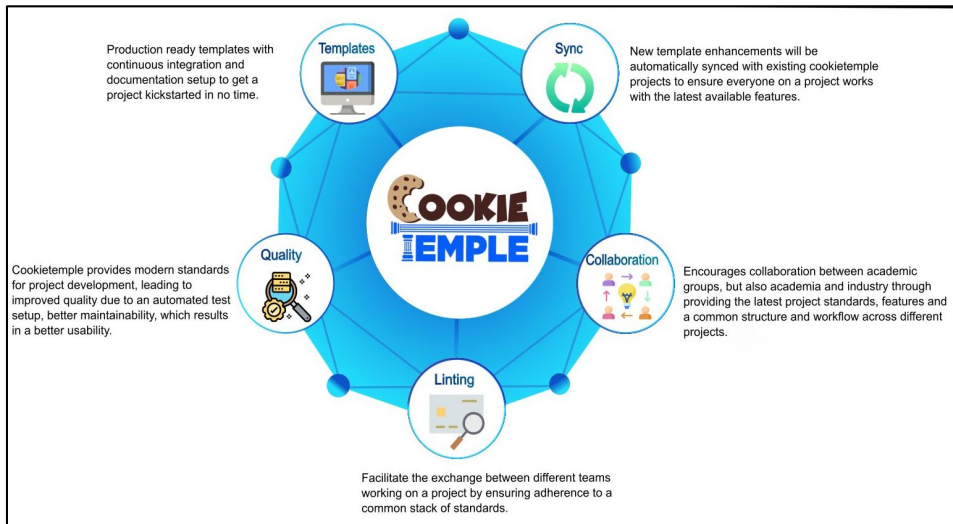


Scott Mackey, <https://www.adlibsoftware.com/blog/authors/scott-mackey.aspx>



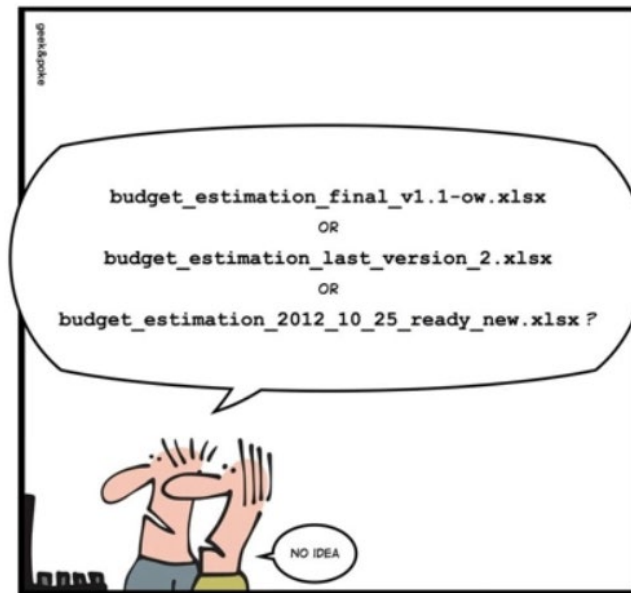
SangyaPundir, CC BY 4.0, <https://commons.wikimedia.org>





L. Heumos, <https://cookiecrafter.com>

## SIMPLY EXPLAINED



<https://geek-and-poke.com>

VERSION CONTROL

- Leuchtturmprojekte  
<https://www.hifis.net/spotlights.html>

- Preise:
  - CampusSource Award
  - Open Science Awards for Research Software

- Softwarepublikation
  - „Make your code ready for publication“

- Indikatorik

HELMHOLTZ SOFTWARE SPOTLIGHTS

This is a preliminary list of software spotlights and more will be added soon. Stay tuned!

**CHEMOTION ELN**  
Chemotion ELN is an Open Source electronic lab notebook (ELN) for scientists working in chemistry and colleagues from neighboring disciplines, developed and updated at KIT. The web-based application allows the acquisition, management, storage, processing, and sharing of research data.  
more...

**ENPT**  
The Environmental Mapping and Analysis Program (EnMAP) is a German hyperspectral satellite mission that aims at monitoring and characterising Earth's environment on a global scale. EnMAP measures and models key dynamic processes of Earth's ecosystems by extracting geochemical, biochemical and biophysical parameters that provide information on the status and evolution of various terrestrial and aquatic ecosystems.  
more...

**FESOM**  
FESOM (Finite-Element/VolumE Sea Ice-Ocean Model) is a multi-resolution sea ice-ocean model

**OSEC 2022 - Paris Open Science European Conference**  
@Osec2022

Ulrike Lucke's three wishes to the Fairy...

#OSEC2022  
Tweet übersetzen

**Three Wishes to the Fairy**

1. Recognize the production of research software as a result of research. (time, funding, skills, ...)
2. Recognize the availability of research software as valuable outcome. («publication» counts, metrics, appointment procedures, ...)
3. Recognize the quality of research software as an important issue. (coding practices, IT infrastructures, support structures, ...)

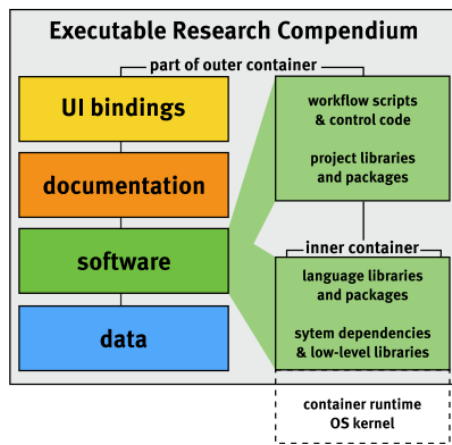
Recognize software as a first-class citizen.

2:38 nachm. · 5. Feb. 2022 · TweetDeck

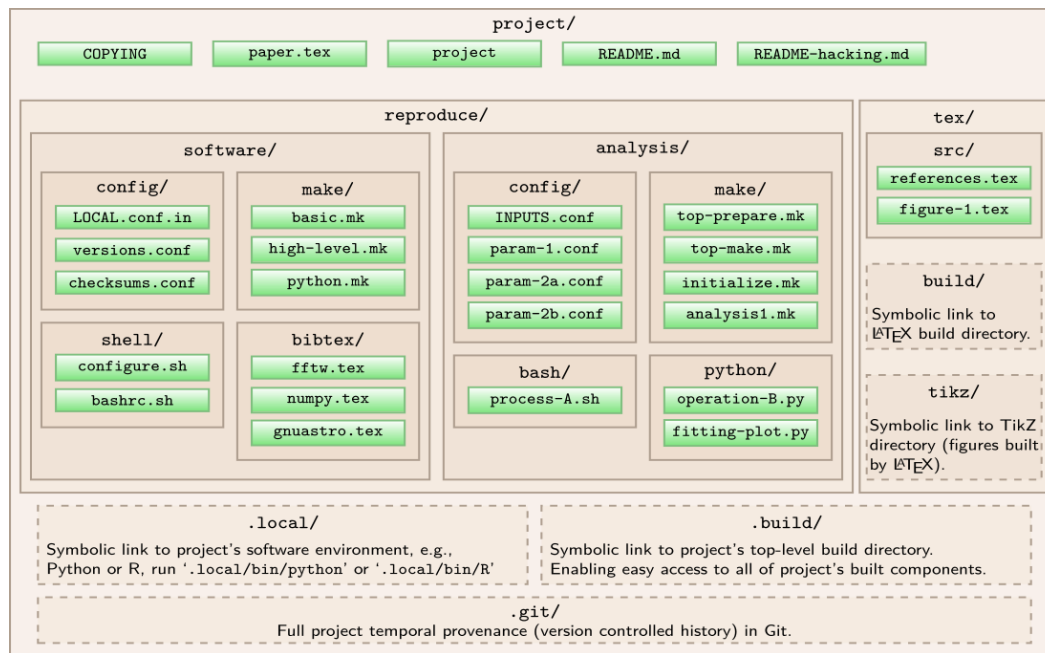
<https://twitter.com/Osec2022/status/1489956652581281792?t=cvVbyDGzUyc-c5w6B1IQ2g&s=19>



# OR

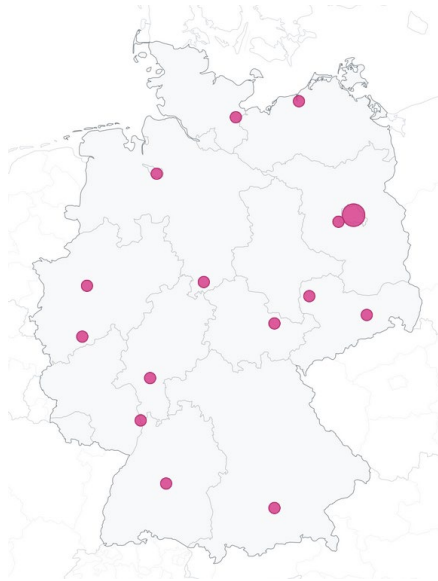


Nüst, D., 2021, <https://doi.org/10.5281/zenodo.5108218>



<https://maneaage.org>

- <https://reproducibilitynetwork.de/>
- Virtual brainstorming event 03./04.03.2022 – Anmeldungen noch möglich!



## Researchers

We **support researchers** in educating themselves about open science practices, and founding local open science communities.



## Reproducibility Initiatives

We connect **local or topic-centered Reproducibility Initiatives** to a national network, and foster connections between them.



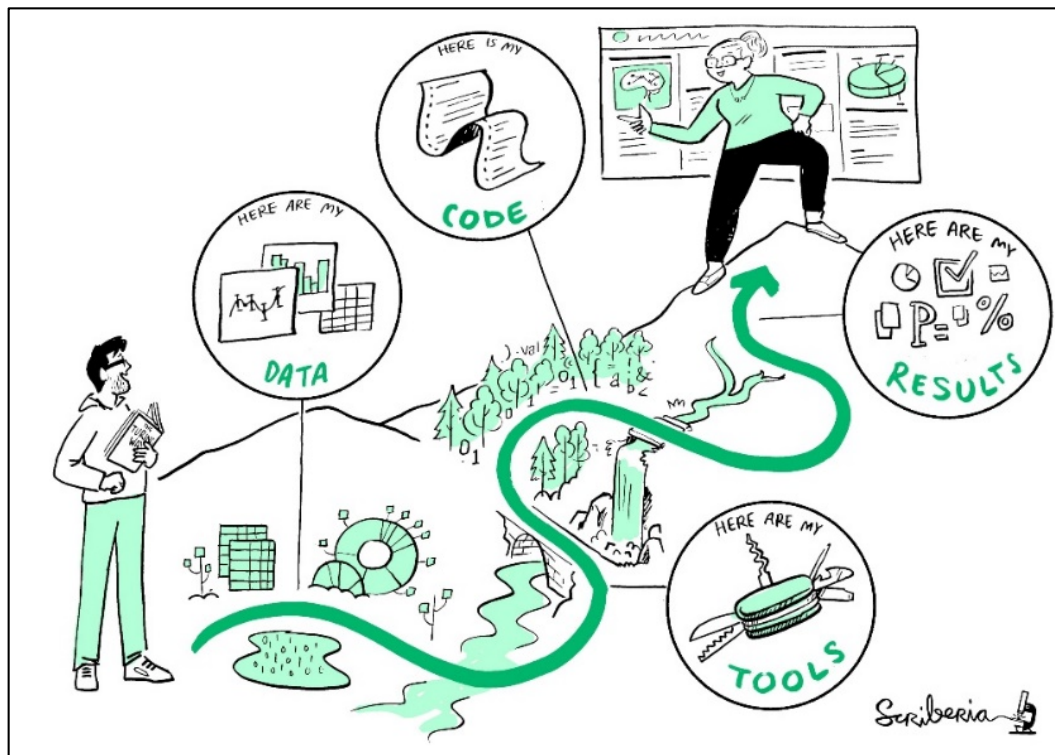
## Institutions

We advise **institutions** on how to embed open science practices in their work.



## Other Stakeholders

We represent the **open science community** toward other stakeholders in the wider scientific landscape.



Sciberia for The Turing Way community, CC BY 4.0, [10.5281/zenodo.3332807](https://zenodo.org/record/3332807)

Vielen Dank für die Aufmerksamkeit