

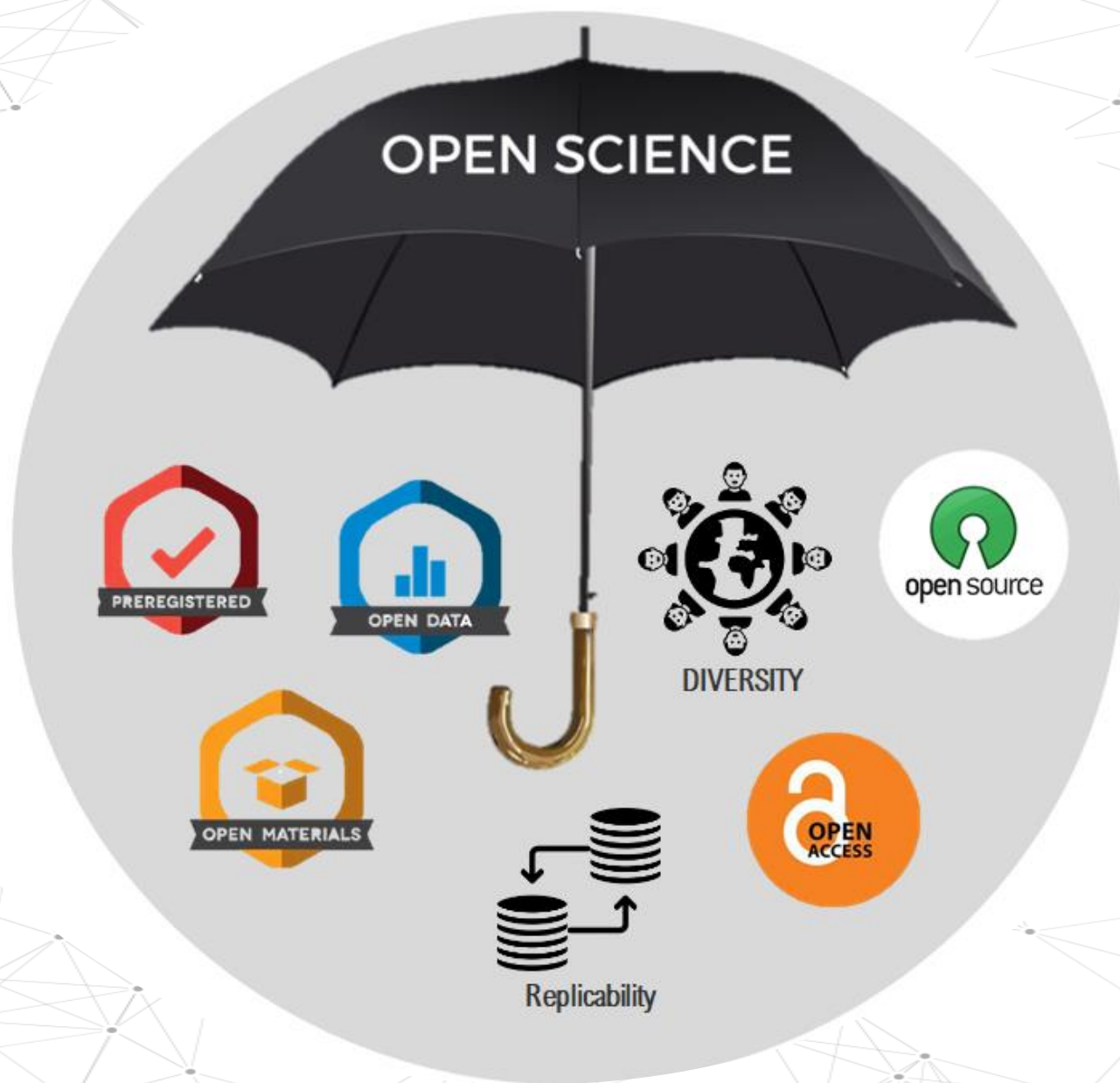


The German Reproducibility Network – a strong network to implement Open Science in Germany

deRSE – Karlsruhe, 26.02.2025

Maximilian Frank & Lydia Riedl

GRN Steering Committee



German Reproducibility Network



Founded in 2020 as the first nationwide, cross-disciplinary organization to strengthen research transparency and reproducibility in science

A "network of networks" – umbrella organization for Open Science and Reproducibility initiatives in Germany



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



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



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



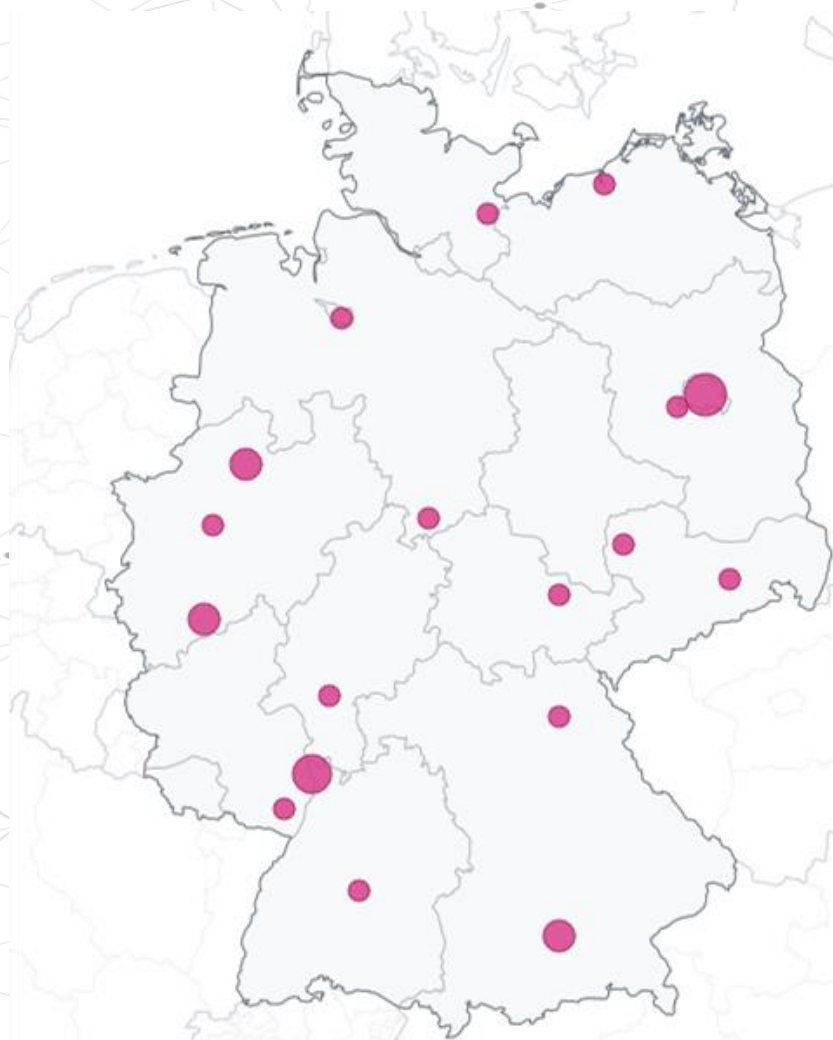
We **represent the open science community** toward other stakeholders in the wider scientific landscape.



International
Cooperation



Member



42 members in the GRN ("local nodes")
as of September 2024

3 types of members:

- Reproducibility Initiative
- Research Institution
- Academic Societies

University of Mannheim joins in August 2022 as
first German university

Low-threshold accession for initiatives, detailed
process for institutions (signing of a memorandum
of understanding + evaluation after 3 years)

Introduction videos of the members on our website:
<https://reproducibilitynetwork.de/members>

GRN Steering Committee



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Everyone (R4E)



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- Steering Committee) with up to 12 members
- Management of GRN activities
- Broad representation of the Open Science landscape in terms of career level, discipline & research topics

Overview – GRN Activities

We organized a session on Enabling reproducibility in (data) science at the RDA Germany Conference 2023 [\[1\]](#)

We issued a Press statement in March 2023 in the context of the WissZeitVG–Reform demanding better working conditions and support for open science practices [\[2\]](#)

We organized a session on „FAIR and Reproducible Code“ on the deRSE24 – Conference for Research Software Engineering [\[3\]](#)

We conducted a Meta Science Summer School and an accompanying Webinar Series for ECRs [\[4\]](#)

We wrote a community paper on how to establish open science practices [\[5\]](#)

We were cosponsoring the META–REP 2024 Conference in Munich [\[6\]](#)

deRSE 2024 Conference – Würzburg




Eleven Strategies – Community Paper

Review Article

Medicine


Eleven strategies for making reproducible research and open science training the norm at research institutions


Friederike E Kohrs, Susann Auer, Alexandra Bannach-Brown, Susann Fiedler, Tamarinde Laura Haven, Verena Heise, Constance Holman, Flavio Azevedo, René Bernard ... Tracey L Weissgerber  [see all »](#)


QUEST Center for Responsible Research, Berlin Institute of Health at Charité - Universitätsmedizin Berlin, Germany; Department of Plant Physiology, Faculty of Biology, Technische Universität Dresden, Germany; Department Strategy & Innovation, Vienna University of Economics and Business, Austria; Danish Centre for Studies in Research & Research Policy, Department of Political Science, Aarhus University, Denmark; Freelance researcher, Germany; Saxony Center for Criminological Research, Germany; University of Cambridge, United Kingdom; NeuroCure Cluster of Excellence, Charité - Universitätsmedizin Berlin, Germany; Department for Computational Social Sciences, GESIS - Leibniz Institute for the Social Sciences, Germany [see all »](#)


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Meta Science Summer School



META-REP Conference Munich 2024



META-REP 2024 – OCTOBER 28 TO 31, 2024
CONFERENCE ON META-SCIENCE AND REPLICABILITY



www.en.lmu.de | [LMU-Portal](#) | [Sitemap](#)

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META-REP ON TWITTER:



We are delighted to announce META-REP 2024 – the Conference on Meta-Science and Replicability in the social, behavioral, and cognitive sciences. It will be held from October 28 to 31, 2024 in Munich. The conference is organized by the DFG-funded Priority Program [META-REP](#).

In recent years, replicability, reproducibility, robustness, and validity of empirical findings became a focal and intensively debated and researched topic in the behavioral and social sciences. Aside from an intensive scientific discourse, these dynamics caused demands for change and innovation. In response to these developments, the META-REP program is oriented towards three main (meta-)scientific research goals: (1) to define, describe, and assess “replicability” (the what-question), (2) to provide explanations for replication rates, heterogeneity and deviation in replication results (the why-question), and (3) to assess effectiveness and efficiency of strategies and change aimed at improving robustness (the how-question). We are convinced that many scholars in the fields of the behavioral and social sciences can contribute valuable findings, ideas, and discussions to (one of) these three goals. We are excited to provide a platform for the exchange of manifold replication-related research findings and innovation from all scientific disciplines (as well as science communicators, delegates from funding agencies, academies, or science organizations). We thus want to invite everyone whose work relates to one of the manifold aspects of replicability research to attend and/or contribute to META-REP 2024!

We hope to see you in Munich,
Prof. Dr. Mario Gollwitzer
META-REP Program Coordinator

Press statement – WissZeitVG reform



- PRESSEMITTEILUNG -

München, 20.03.2023

Spitzenforschung braucht sichere Arbeitsverhältnisse German Reproducibility Network fordert mehr Dauerstellen im Kontext der Reform des Wissenschaftszeitvertragsgesetz in Deutschland

Der Großteil der Jobs abseits der Professur in der Wissenschaft ist von befristeten Anstellungsverhältnissen und großer Unsicherheit geprägt. Den rechtlichen Rahmen hierzu liefert das Wissenschaftszeitvertragsgesetz (WissZeitVG), welches eine befristete Anstellung des Personals im akademischen Mittelbau als Ausnahmeregelung jenseits des Teilzeit- und Befristungsgesetzes vorsieht [1]. Die Bundesregierung hat sich im 2021 geschlossenen Koalitionsvertrag zu einer Reform des WissZeitVG mit dem Ziel sicherer Arbeitsverhältnisse und besser planbarer Karrierepfade in der Wissenschaft verpflichtet [2]. Anlässlich der Veröffentlichung der Eckpunkte der Reform durch das BMBF am 17.03.2023 [3] positioniert sich das German Reproducibility Network (GRN) zum dringenden Reformbedarf im deutschen Wissenschaftssystem und fordert mehr Dauerstellen.

<https://reproducibilitynetwork.de/pressrelease/>


Comment

nature human behaviour

<https://doi.org/10.1038/s41562-022-01508-2>

Quality research needs good working conditions

Rima-Maria Rahal, Susann Fiedler, Adeyemi Adetula, Ronnie P.-A. Berntsson, Ulrich Dirnagl, Gordon B. Feld, Christian J. Fiebach, Samsad Afrin Himi, Aidan J. Horner, Tina B. Lonsdorf, Felix Schönbrodt, Miguel Alejandro A. Silan, Michael Wenzler & Flávio Azevedo

 Check for updates

High-quality research requires appropriate employment and working conditions for researchers. However, many academic systems rely on short-term employment contracts, biased selection procedures and misaligned incentives, which hinder research quality and progress. We discuss ways to redesign academic systems, emphasizing the role of permanent employment.

Taken together, these employment conditions have become a hindrance to research productivity, innovation and progress, and are an undisputable source of discrimination³. Paradoxically, these employment conditions are purportedly designed to incentivize high-quality research.

High turnover harms research quality

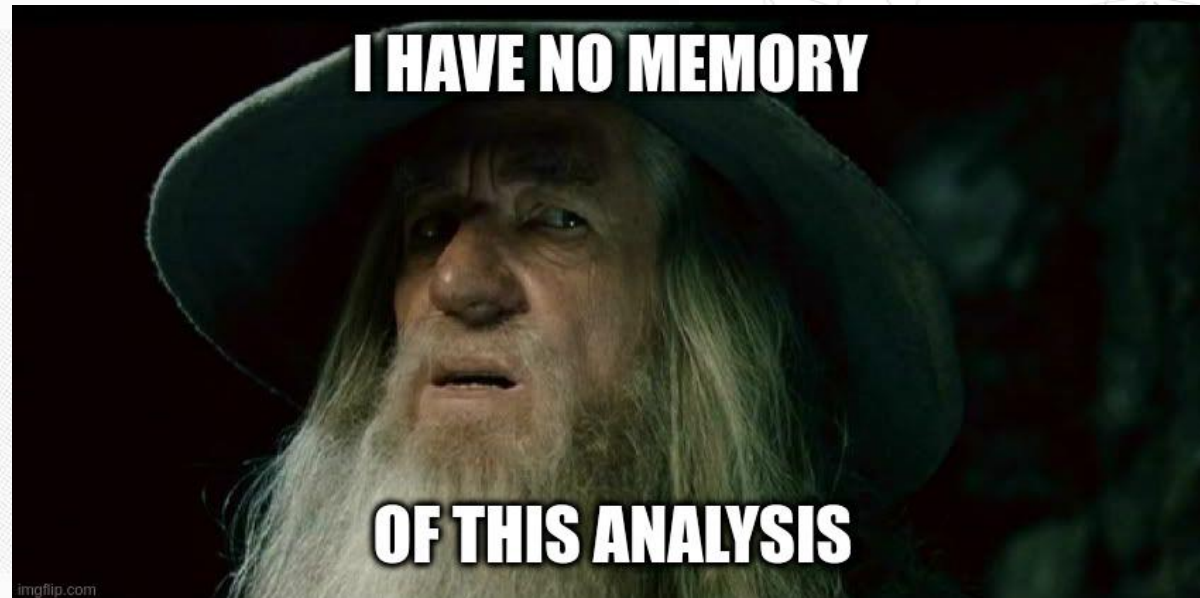
One argument that is often made in favour of fixed-term contracts regards the alleged benefits of attracting new staff, assuming that a constant influx of new thinkers avoids stagnation and enables innovation. However, the resulting high turnover in academic institutions fosters cursory research and hinders thorough, long-term projects. Research projects often hit a dead end when researchers drop out because their contracts have expired. Methodological expertise, which often takes

The role of reproducibility in science

The Reproducibility “Crisis”

“More than 70% of researchers have tried and failed to reproduce another scientist's experiments, and more than half have failed to reproduce their own experiments.”

Baker, Monya. 2016. “1,500 Scientists Lift the Lid on Reproducibility.” *Nature* 533 (7604): 452–54.



The role of reproducibility in science



UNESCO Recommendation on Open Science:

<https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en>

DFG statement:

<https://zenodo.org/record/7193838#.Y063VHZBxaQ>

Berlin declaration on open access to knowledge:

<https://openaccess.mpg.de/Berliner-Erklärung>

Agreement for a cultural change in science:

<https://coara.eu/agreement/the-agreement-full-text/>

The diversity of research outputs



Aufsätze



Berichte und Pläne



Bücher



Forschungsdaten



Offene Ressourcen



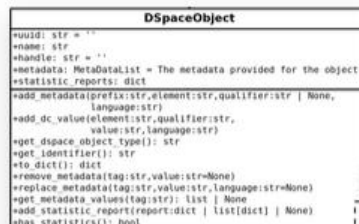
Open Educational
Resources



Schriftenreihen



Schriftensammlungen



Software & Code

All the research outputs
are of **value**
and should be **published FAIR**:

Findable
Accessible
Interoperable
Reusable

The role of reproducibility in science

Results of the ISMRM 2020 joint Reproducible Research & Quantitative MR study groups reproducibility challenge on phantom and human brain T1 mapping

Jupyter Notebook Submitted 05 June 2023 • Published 09 October 2023

Summary

Statement of need


Figures

Acknowledgements

1 | INTRODUCTION

2 | METHODS

Affiliations



Reproducible Preprints

Results of the ISMRM 2020 joint Reproducible Research & Quantitative MR study groups reproducibility challenge on phantom and human brain T1 mapping

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DOI: [10.55458/neurolibre.00014](https://doi.org/10.55458/neurolibre.00014)

Reproducible Preprint

- Jupyter Book


Code

- Technical Screening
- Submitted Repository

Reproducibility Assets

- Repository
- Dataset
- Jupyter Book
- Container

*** These authors contributed equally.**

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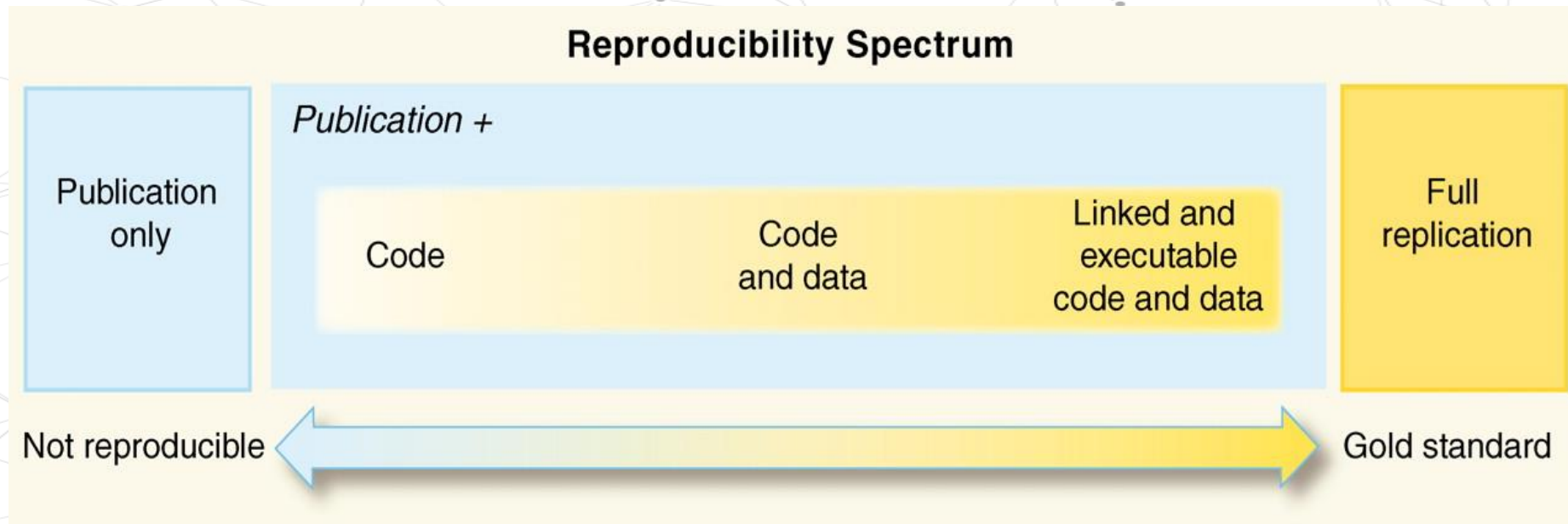
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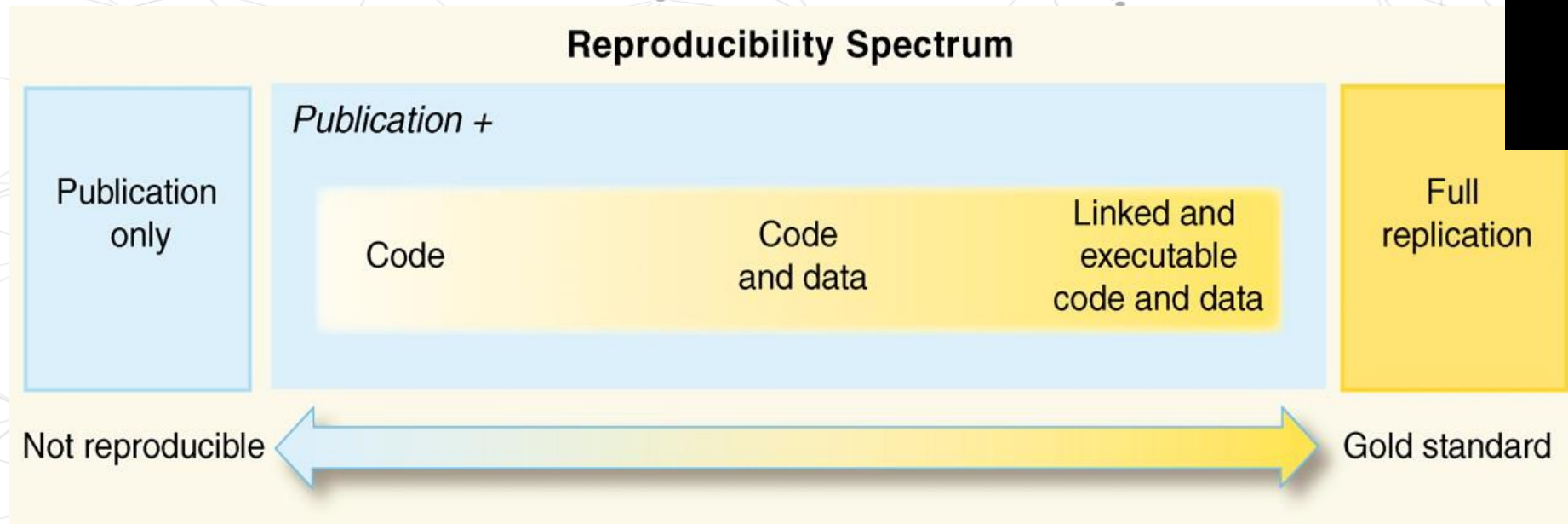
Vision: Reproducible papers!
<https://doi.org/10.55458/neurolibre.00014>

The diversity of research outputs



The diversity of research outputs

**BETTER
SOFTWARE
BETTER
RESEARCH**



<https://de-rse.org/de/index.html>

Benefits in Joining the GRN



Collaboration & Networking

- Get together with other Open Science/ Reproducibility enthusiasts
- Connect to scientists across different disciplines



Access to Training & Resources:

- Participate in training activities and workshops
- Gain access to guidelines, tools, and expertise that help improve research transparency



Influence Policy & Practice:

- drive systemic changes in the academic system
- Working with policymakers, funders, and publishers

How to get in touch



Visit our homepage: <https://reproducibilitynetwork.de>



Join our mailing list: <https://lists.lrz.de/mailman/listinfo/grn>

For general inquiries: info@reproducibilitynetwork.de

Interested in becoming a member, get in touch with the Steering Committee:
grn-steering@lists.lrz.de



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Mastodon: <https://mastodon.world/@GermanRepro>

Twitter: [@GermanRepro](https://twitter.com/GermanRepro) (archived)



Time for your Questions