

# On the road towards a PID strategy for Germany

NFDI InfraTalk series

June 05, 2023, 04:00 p.m.

Antonia C. Schrader (Helmholtz Association)

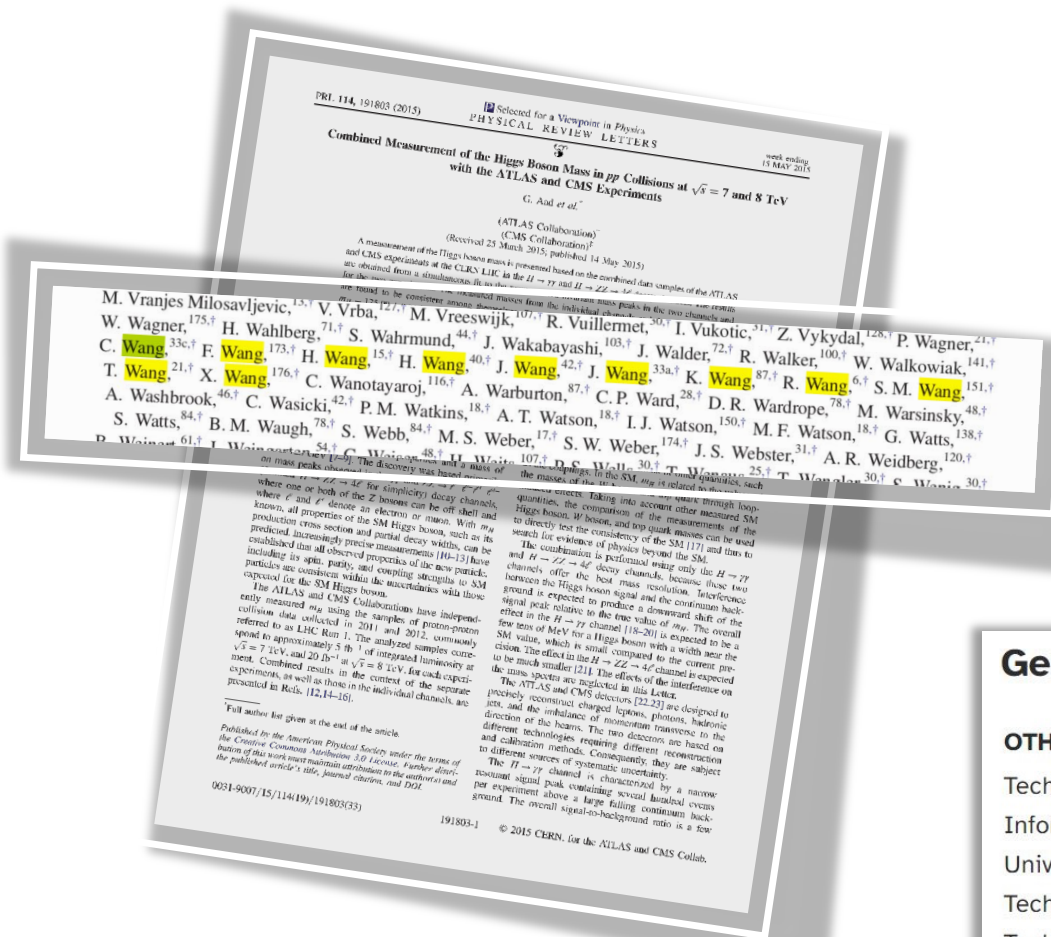
R. Bertelmann<sup>1</sup>, H. Pampel<sup>1,2</sup>, P. Vierkant<sup>3</sup>, B. Dreyer<sup>4</sup>, S. Hagemann-Wilholt<sup>4</sup>, Philipp Wieder<sup>5</sup>, S. Glagla-Dietz<sup>6</sup>, J. Kett<sup>6</sup>, D. Pieper<sup>7</sup>, J. Schirrwagen<sup>7</sup>

*<sup>1</sup>Helmholtz-Gemeinschaft, Helmholtz Open Science Office, Potsdam, Deutschland, <sup>2</sup>Humboldt-Universität zu Berlin, Institut für Bibliotheks- und Informationswissenschaft (IBI), Berlin, Deutschland, <sup>3</sup>DataCite, Hannover, Deutschland, <sup>4</sup>TIB, Hannover, Deutschland, <sup>5</sup>Gesellschaft für wissenschaftliche Datenverarbeitung (GWDG), <sup>6</sup>DNB, Frankfurt, Deutschland, <sup>7</sup>Universität Bielefeld, Bibliothek, Bielefeld, Deutschland*

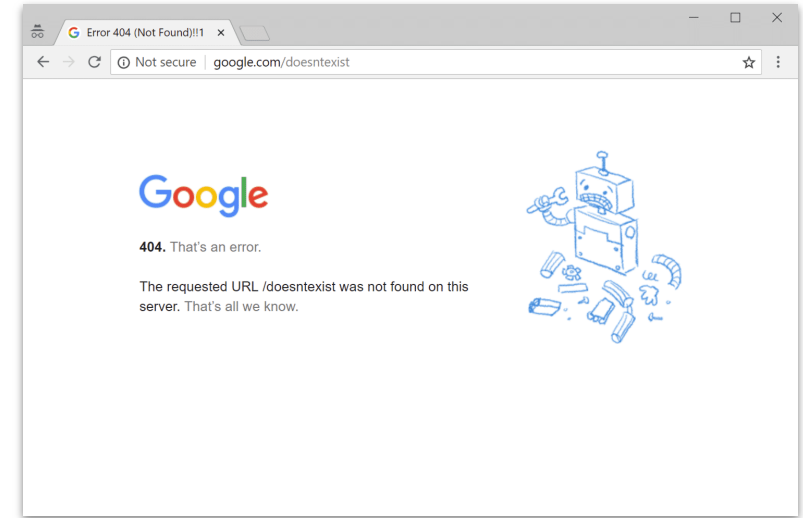
1. Introduction on Persistent Identifiers (PIDs)
2. PID Network Germany
3. PID4NFDI

# PIDs – Why?

<https://doi.org/10.1103/PhysRevLett.114.191803>



11 „Wangs“ as authors of one paper



Invalid URL

## German National Library of Science and Technology

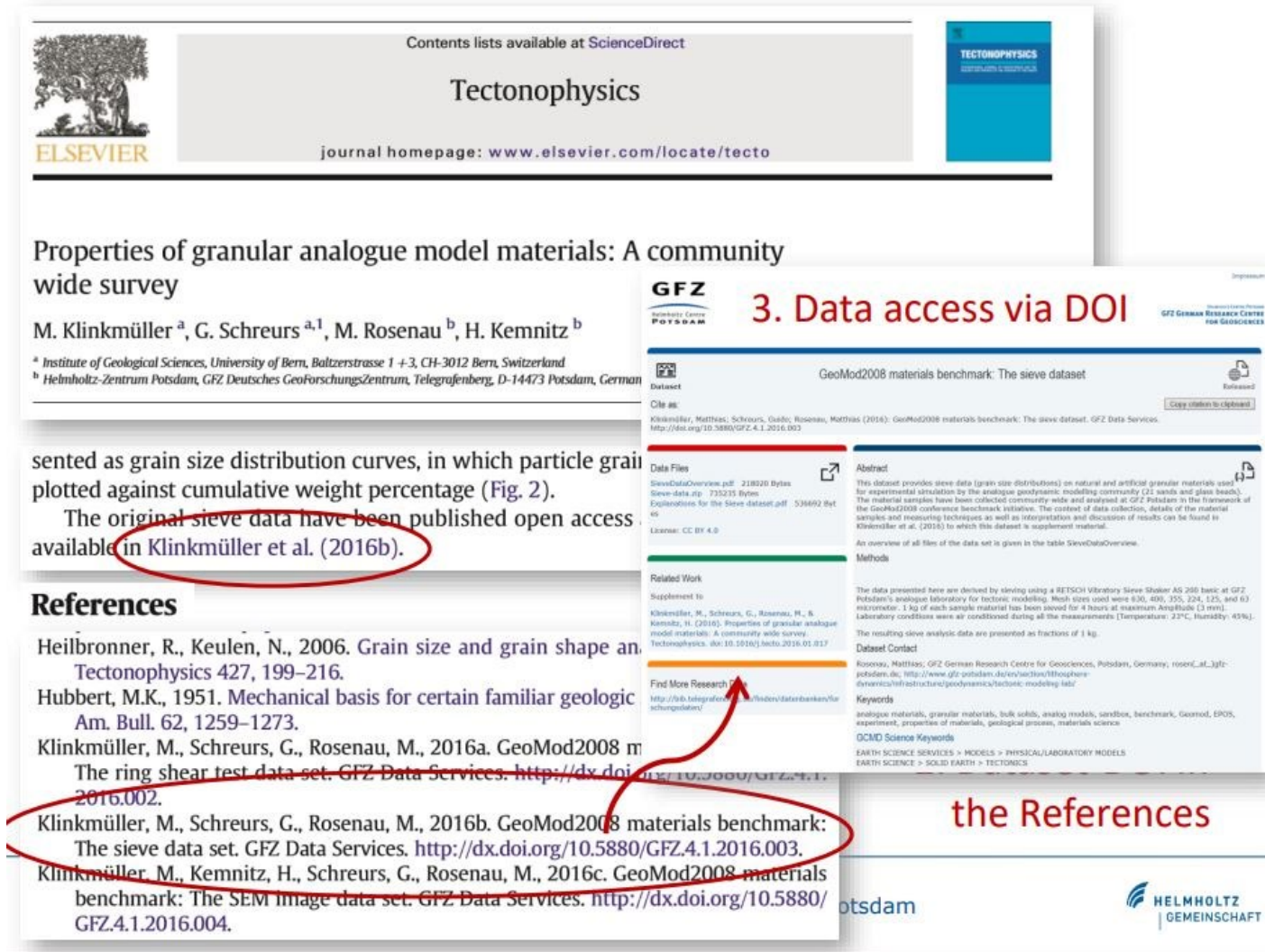
### OTHER NAMES

Technische Informationsbibliothek (TIB) - Leibniz-  
Informationszentrum Technik und Naturwissenschaften -  
Universitätsbibliothek, German National Library of Science and  
Technology (TIB) - Leibniz Information Centre for Science and  
Technology - University Library, TIB, Technische  
Informationsbibliothek

At least 4 different  
variants of the  
organization name

# This is why:

PIDs enable cross-references between the article and the dataset



Contents lists available at ScienceDirect  
**Tectonophysics**  
journal homepage: [www.elsevier.com/locate/tecto](http://www.elsevier.com/locate/tecto)

Properties of granular analogue model materials: A community wide survey  
M. Klinkmüller<sup>a</sup>, G. Schreurs<sup>a,1</sup>, M. Rosenau<sup>b</sup>, H. Kemitz<sup>b</sup>  
<sup>a</sup> Institute of Geological Sciences, University of Bern, Baltzerstrasse 1 +3, CH-3012 Bern, Switzerland  
<sup>b</sup> Helmholtz-Zentrum Potsdam, GFZ Deutsches Geoforschungszentrum, Telegrafenberg, D-14473 Potsdam, Germany

sented as grain size distribution curves, in which particle grain plotted against cumulative weight percentage (Fig. 2).  
The original sieve data have been published open access available in Klinkmüller et al. (2016b).

**References**  
Heilbronner, R., Keulen, N., 2006. Grain size and grain shape analysis. *Tectonophysics* 427, 199–216.  
Hubbert, M.K., 1951. Mechanical basis for certain familiar geologic structures. *Am. Bull.* 62, 1259–1273.  
Klinkmüller, M., Schreurs, G., Rosenau, M., 2016a. GeoMod2008 materials benchmark: The ring shear test data set. *GFZ Data Services*. <http://dx.doi.org/10.5880/GFZ.4.1.2016.002>.  
Klinkmüller, M., Schreurs, G., Rosenau, M., 2016b. GeoMod2008 materials benchmark: The sieve data set. *GFZ Data Services*. <http://dx.doi.org/10.5880/GFZ.4.1.2016.003>.  
Klinkmüller, M., Kemitz, H., Schreurs, G., Rosenau, M., 2016c. GeoMod2008 materials benchmark: The SEM image data set. *GFZ Data Services*. <http://dx.doi.org/10.5880/GFZ.4.1.2016.004>.

**3. Data access via DOI**  
GFZ Helmholtz Centre POTSDAM  
GeoMod2008 materials benchmark: The sieve dataset  
Dataset  
Cite as: Klinkmüller, Matthias; Schreurs, Gerd; Rosenau, Matthias (2016): GeoMod2008 materials benchmark: The sieve dataset. GFZ Data Services. <http://doi.org/10.5880/GFZ.4.1.2016.003>  
Data Files  
SieveDataOverview.pdf 218020 Bytes  
Sieve-data.zip 732235 Bytes  
Explanations for the Sieve dataset.pdf 536692 Bytes  
License: CC BY 4.0  
Related Work  
Supplement to: Klinkmüller, M., Schreurs, G., Rosenau, M., & Kemitz, H. (2016): Properties of granular analogue model materials: A community wide survey. *Tectonophysics*. doi:10.1016/j.tecto.2016.01.017  
Find More Research  
<http://bib.informatik.uni-potsdam.de/doi/10.5880/GFZ.4.1.2016.003>  
Abstract  
This dataset provides sieve data (grain size distributions) on natural and artificial granular materials used for experimental simulation by the analogue geodynamic modelling community (2:2 sands and glass beads). The material samples have been collected community-wide and analysed at GFZ Potsdam in the framework of the GeoMod2008 conference benchmark initiative. The content of data collection, details of the material samples and measuring techniques as well as interpretation and discussion of results can be found in Klinkmüller et al. (2016) to which this dataset is supplemental material.  
An overview of all files of the data set is given in the table SieveDataOverview.  
Methods  
The data presented here are derived by sieving using a RETSCH Vibratory Sieve Shaker AG 200 basic at GFZ Potsdam's analogue laboratory for tectonic modelling. Mesh sizes used were 830, 400, 250, 125, and 63 micrometer. 1 kg of each sample material has been sieved for 4 hours at maximum amplitude (2 mm), laboratory conditions were air conditioned during all the measurements (Temperature: 23°C, Humidity: 45%).  
The resulting sieve analytic data are presented as fractions of 1 kg.  
Dataset Contact  
Rosenau, Matthias; GFZ German Research Centre for Geosciences, Potsdam, Germany; rosen\_m\_at\_gfz-potsdam.de; <http://www.gfz-potsdam.de/en/activities/11050sphere-dynamics/restructure/geodynamics/tectonic-modelling-16/>  
Keywords  
analogue materials, granular materials, bulk solids, analog models, sandbox, benchmark, Geomod, EPOS, experiment, properties of materials, geological processes, materials science  
DCMD Science Keywords  
EARTH SCIENCE SERVICES > MODELS > PHYSICAL/LABORATORY MODELS  
EARTH SCIENCE > SOLID EARTH > TECTONICS

**the References**  
potSDAM HELMHOLTZ GEMEINSCHAFT

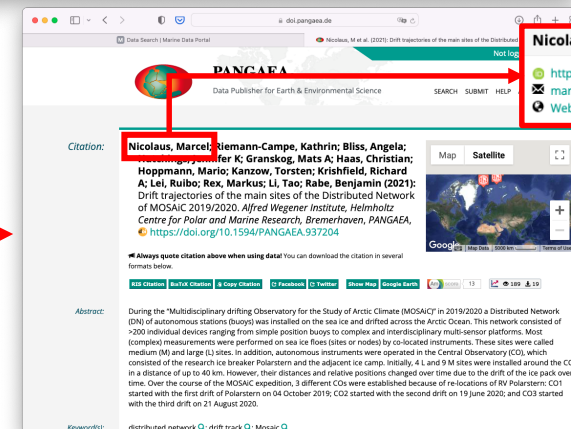
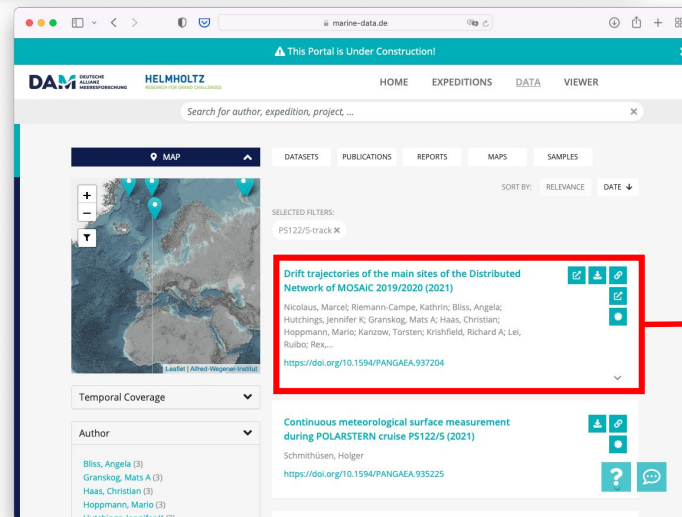
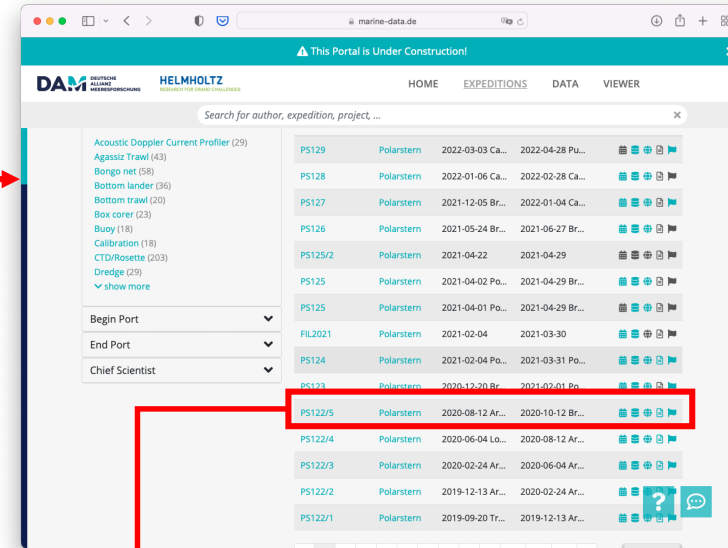
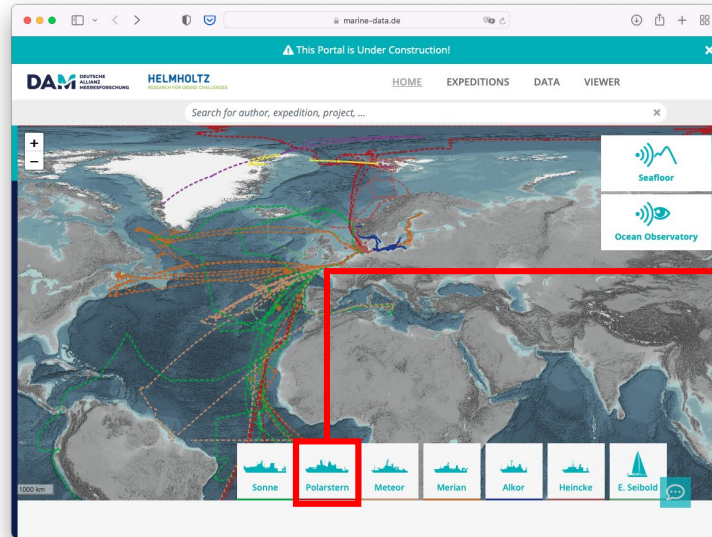
Source:  
Elger, K. (2016).  
[https://os.helmholtz.de/fileadmin/user\\_upload/os.helmholtz.de/Workshops/rda\\_de\\_16\\_elger.pdf](https://os.helmholtz.de/fileadmin/user_upload/os.helmholtz.de/Workshops/rda_de_16_elger.pdf), S. 25



# This is why:



<https://marine-data.de/>



**Nicolaus, Marcel**  
<https://orcid.org/0000-0003-0903-1746>  
marcel.nicolaus@awi.de  
Web Page

<https://www.pangaea.de/>

Best Practices Report of the ORCID integration in PANGAEA

Interaction between DOI, ORCID & Data

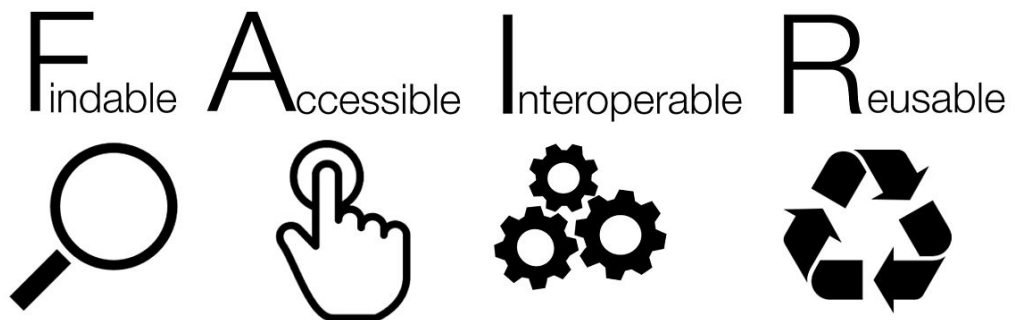


# This is why...

The application of the FAIR principles is unthinkable without the features of PIDs.

**F1: (Meta) data are assigned globally unique and persistent identifiers**

Source: <https://www.go-fair.org/fair-principles/f1-meta-data-assigned-globally-unique-persistent-identifiers>



Source: By [Wikimedia Commons](#),  
licensed under CC BY  
International 4.0.

# A heterogenous PID landscape



## International



## National

[urn:nbn:de:1111-20091210269](#) [urn:nbn:de:v:11-100287](#) [urn:nbn:de:hbz:468-2007031417541491](#) [urn:nbn:de:bsz:21-opus-2952](#)  
[nbn:de:101:1-2010080220](#) [urn:nbn:de:0276](#) [urn:nbn:de:0012:bverwg-17962](#) [urn:nk](#)





# A heterogenous PID landscape



## Research Activity Identifier

Identifying and tracking of research projects and activities  
<https://www.raid.org.au>

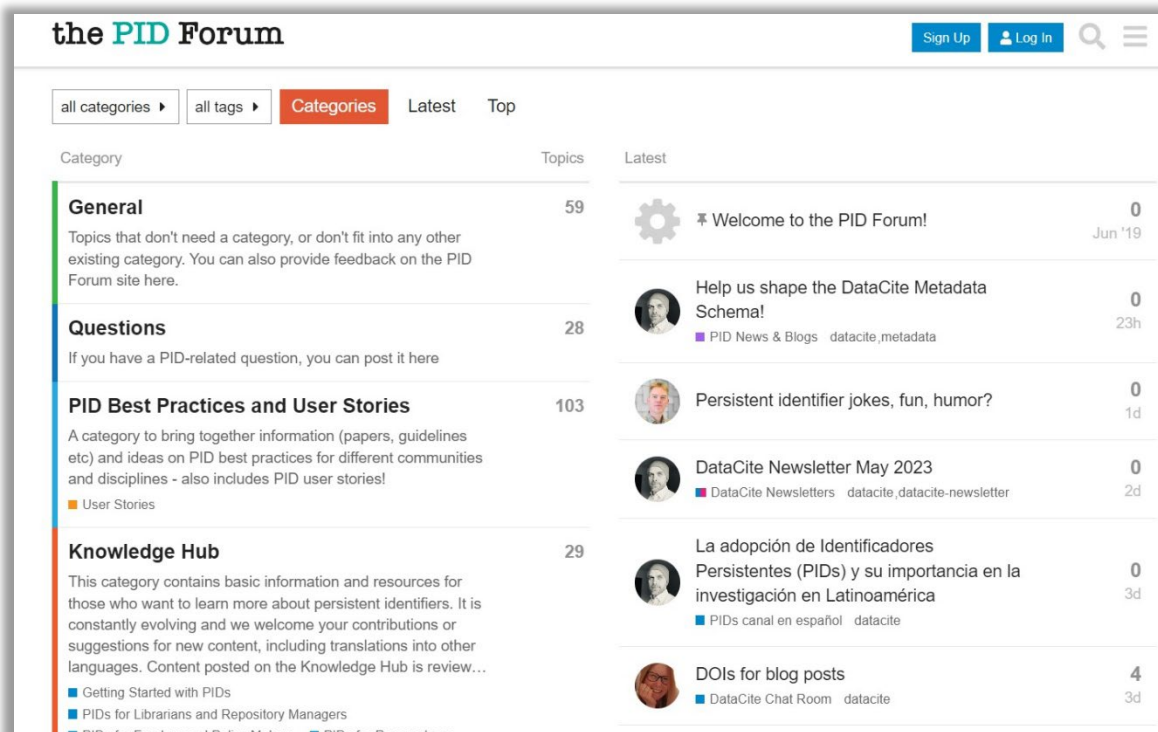


## Research Resource Identifier

Identifying and cite key resources of biomedicine (e.g. antibodies, model organisms and software projects)  
<https://www.rrids.org>

# Challenges

- Users: wide variety of very different PID for different needs
- Organizations: Keeping systems up to date
- [PID Forum](#) – Solution?



The screenshot shows the 'the PID Forum' website interface. It features a navigation bar with 'Sign Up' and 'Log In' buttons, and a search icon. Below the navigation, there are filters for 'all categories', 'all tags', and 'Categories'. The main content area is divided into two columns: 'Category' and 'Topics'. The 'Category' column lists several categories with their respective topic counts: 'General' (59), 'Questions' (28), 'PID Best Practices and User Stories' (103), and 'Knowledge Hub' (29). The 'Topics' column displays a list of forum posts, including a welcome message, a request for help with DataCite Metadata Schema, a post about persistent identifier jokes, a DataCite newsletter announcement, a post about the adoption of PIDs in Latin America, and a post about DOIs for blog posts.



- On March 01, 2023 the project started its work.
- Scheduled to run for 36 months
- The project proposal is published (only in German): <https://doi.org/10.48440/os.helmholtz.059>
- Projects aim:
  - Establishment of a network of already existing and currently forming actors around persistent identifier in the field of digital communication in science and culture
  - Promotion of the usage, implementation, standardization and compatibility to international PID systems on a local, national and international levels.
  - Development of a PID roadmap for Germany
- Project partner institutions:



- Organization of workshops and webinars on a regular basis
- Consulting and support
- Communication of developments around PIDs in a national and international context
- Participation in external conferences and events
- ...



Source: <https://pixabay.com/de/illustrations/online-bildung-internet-e-learning-3412498/>



# Website launched



[pid-network.de](https://pid-network.de)



PERSISTENT IDENTIFIER NEUIGKEITEN SUPPORT NETWORK ÜBER UNS

## Herzlich Willkommen auf der Dialogplattform von „PID Network Deutschland“

Dies ist die zentrale Dialog- und Informationsplattform des von der Deutschen Forschungsgemeinschaft (DFG) geförderten Projekts „PID Network Deutschland – Netzwerk für die Förderung von persistenten Identifikatoren in Wissenschaft und Kultur“.

Die Plattform bündelt zentrale Informationen zu PIDs und unterstützt die Öffentlichkeitsarbeit des Projektes sowie den Wissenstransfer zum Thema. Sie wird innerhalb der Projektlaufzeit sukzessive um Informationen zu internationalen Standards, Best Practices, FAQs und Beratungsangeboten erweitert.

Zusätzlich werden Neuigkeiten zur Entwicklung, Anwendung und Implementierung von PIDs ab sofort über die **Social-Media-Kanäle** des Projekts auf [Mastodon](#) und [Twitter](#) kommuniziert. Wir freuen uns, wenn Sie uns auch hier folgen.

Disclaimer: At the moment only in German available. A translation to English will follow soon.

# Communication channels



## Blog

- <https://www.pid-network.de/neuigkeiten/blog>

## Mailing list

- "ORCID DE Dialog", subscribe [here](#)

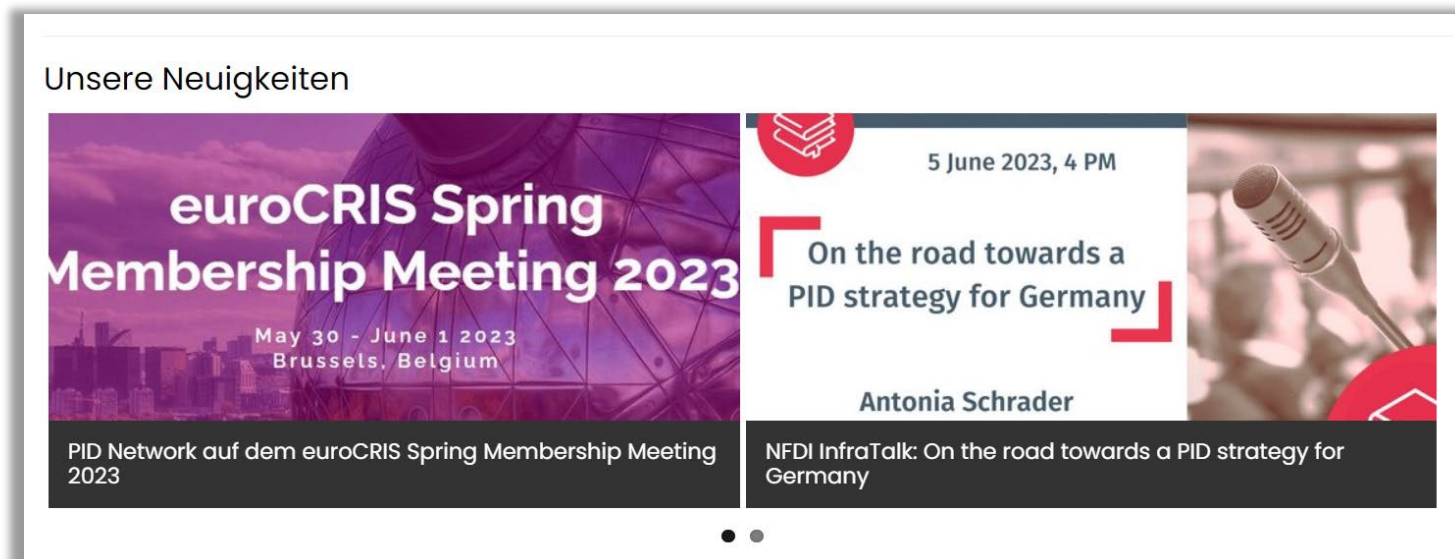
## Social Media

- Mastodon

[@PIDNetworkDE@openbiblio.social](https://openbiblio.social/@PIDNetworkDE)

- Twitter

[@PIDNetworkDE](https://twitter.com/PIDNetworkDE)



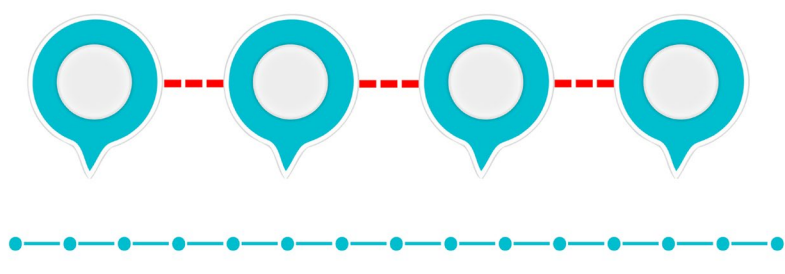
- Conduction of a survey on the PID landscape of Germany
- Monitoring of the development of PID implementations in Germany
- Development of User Stories, PID Guidelines, Best Practices...
- Support of prototypical implementation of guidelines by the community
- Optimization of PID metadata in identifier and aggregation systems (DataCite, German National Library, BASE)



Source: <https://pixabay.com/vectors/survey-icon-survey-icon-2316468>

# Development of a PID roadmap for Germany

- Consolidation of the results from the project and integration into the draft
- public call for comments for drafting and finalization phase
- Taking into account international impulses, such as
  - "PID Policy" of EOSC
  - "PID Strategy of Dutch Research Council (NWO)"
  - Efforts of "Research Identifier National Coordinating Committee (RINCC)"
  - Efforts of "UK PID consortium"



Source: <https://pixabay.com/de/illustrations/gesch%c3%a4ft-idee-wachstum-3189797>



# 10 PID Use cases



PIDs for  
Research  
Data



PIDs for  
scientific  
Conferences



PIDs for  
In-  
struments



PIDs for  
cultural  
Objects &  
their  
Contexts



PIDs for  
Organizations  
& Projects



PIDs for  
Persons



PIDs for  
physical  
Objects



PIDs for  
Repositorie  
s &  
Publication  
Platforms



PIDs for Text  
Publications



PIDs for  
Software

- Proposal of founding **Persistent Identifier Services** for the German National Research Data Infrastructure (NFDI)
- On behalf of the WG Persistent Identifier Services of the Section Common Infrastructures of the NFDI
  - [Charta of the working group](#)
- Applicants:



- The proposal was submitted for the Initialization Phase of Base4NFDI, and is currently under review for funding.

## Aim

- Basis for further phases through use cases analyses, requirements engineering, and concept development
- Promotion of the uptake of PIDs and develop and operate NFDI-specific services
- Addressing NFDI-specific challenges and requirements in terms of PID implementation

**PID4NFDI will complement PID Network Germany –**

Both projects agreed to closely collaborate.



Source:

<https://pixabay.com/de/illustrations/h%C3%A4ndedruck-hand-sch%C3%BCtteln-handeln-4784749>

## Thank you for your Attention!

Antonia C. Schrader



[antonia.schrader@os.helmholtz.de](mailto:antonia.schrader@os.helmholtz.de)



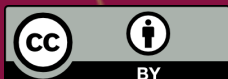
<https://orcid.org/0000-0001-7080-634X>



[@AntoniaS@openbiblio.social](https://openbiblio.social/@AntoniaS)



[@AntoniaCamiS](https://twitter.com/AntoniaCamiS)



All texts in this presentation, except citations, are licensed under  
Attribution 4.0 International (CC BY 4.0): <https://creativecommons.org/licenses/by/4.0/deed.de>