PID NETWORK DEUTSCHLAND

On the road towards a PID strategy for Germany

NFDI InfraTalk series

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

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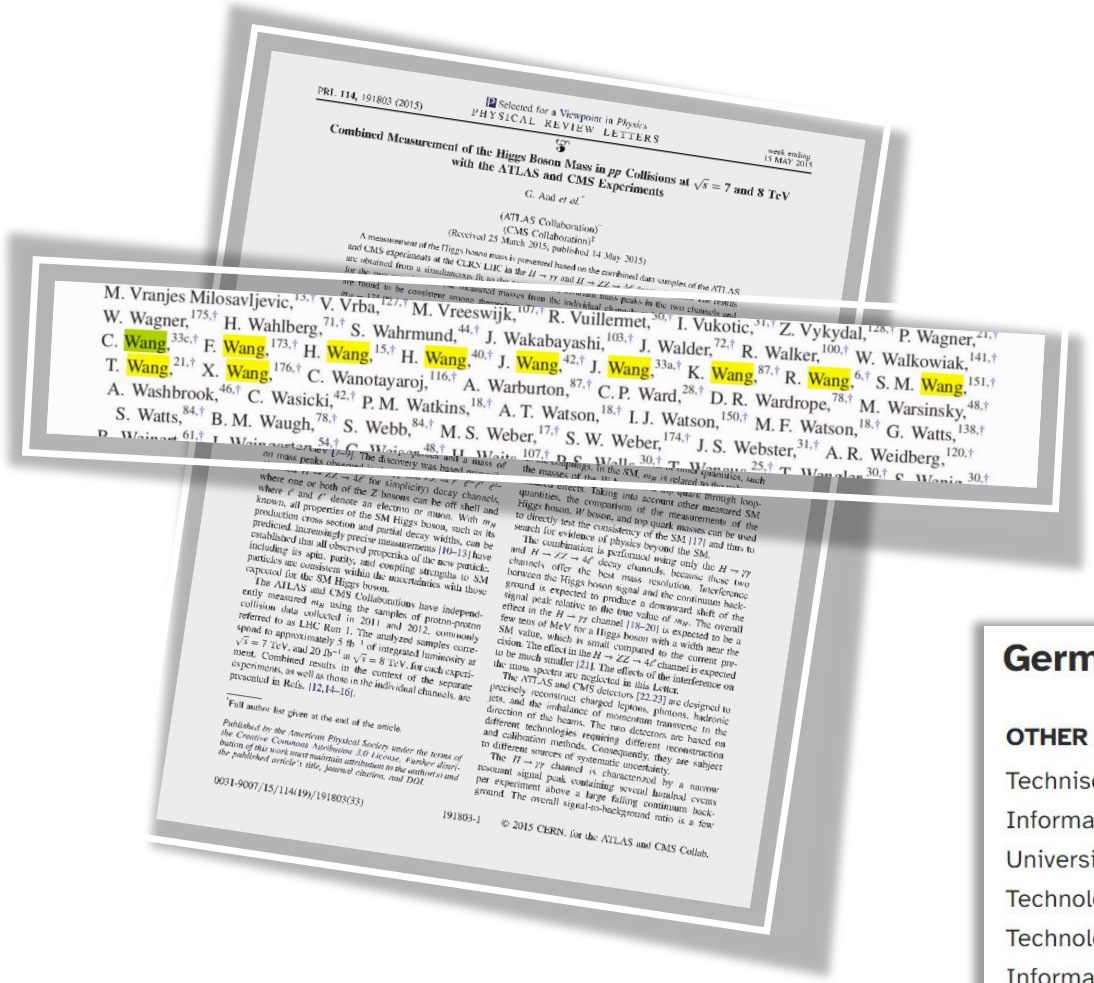
Agenda

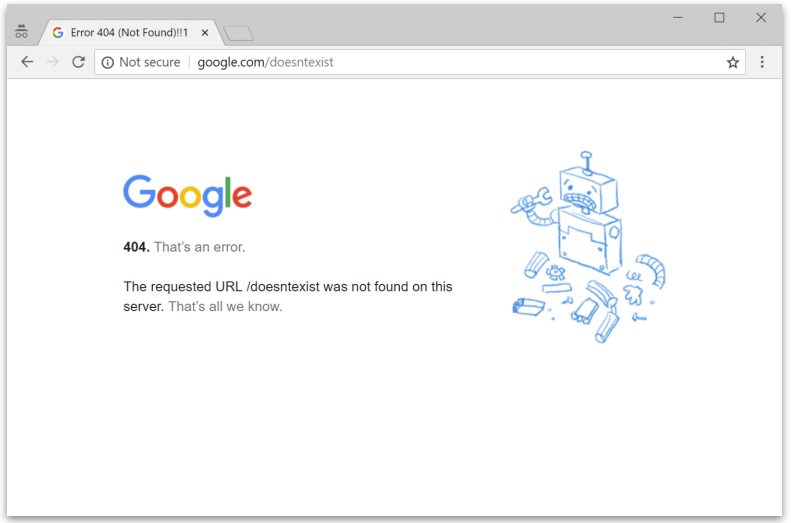
1. Introduction on Persistent Identifiers (PIDs)
2. PID Network Germany
3. PID4NFDI

PIDs – Why?

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



11 „Wangs" as authors of one paper



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German National Library of Science and Technology

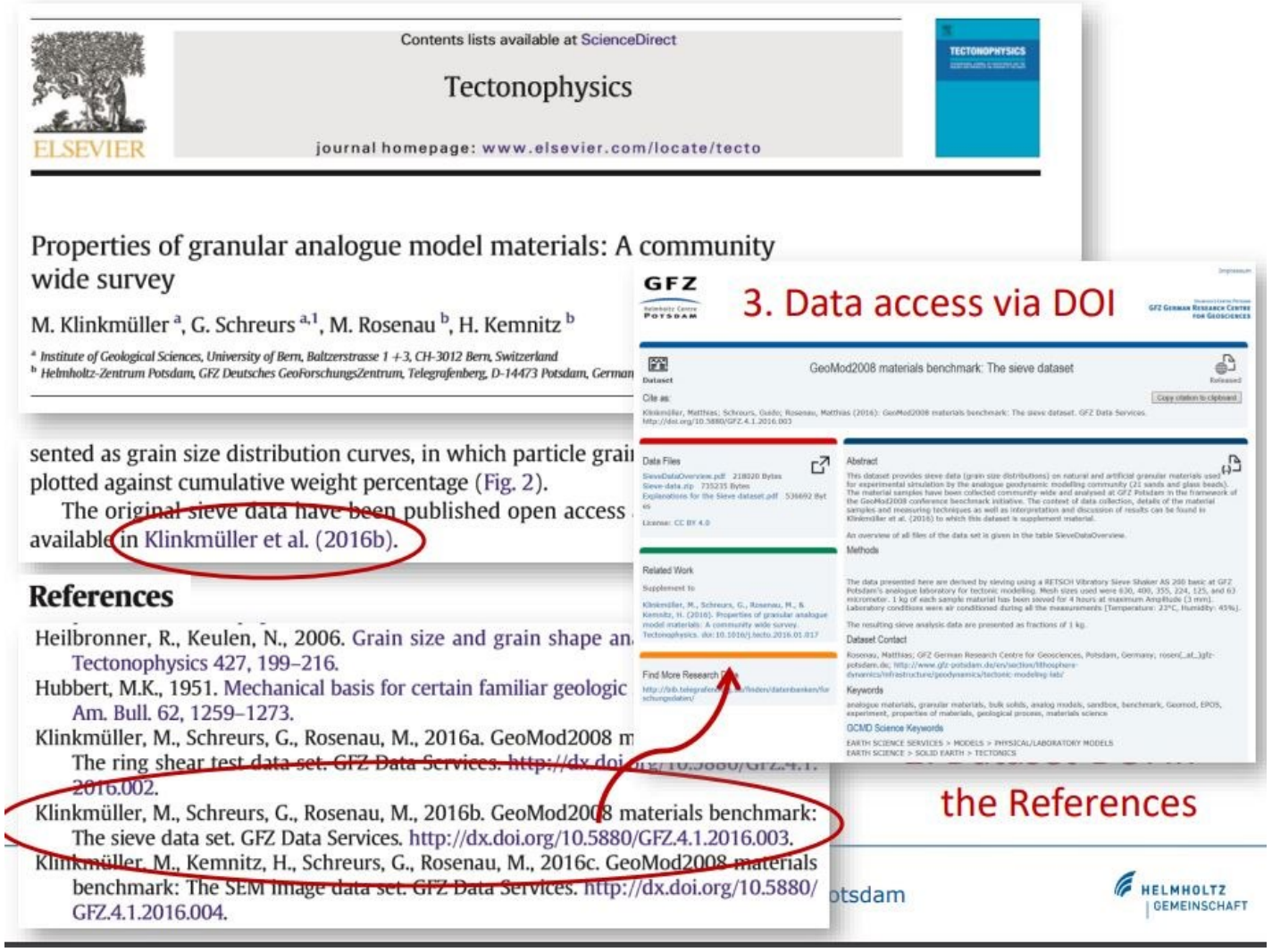
OTHER NAMES

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:

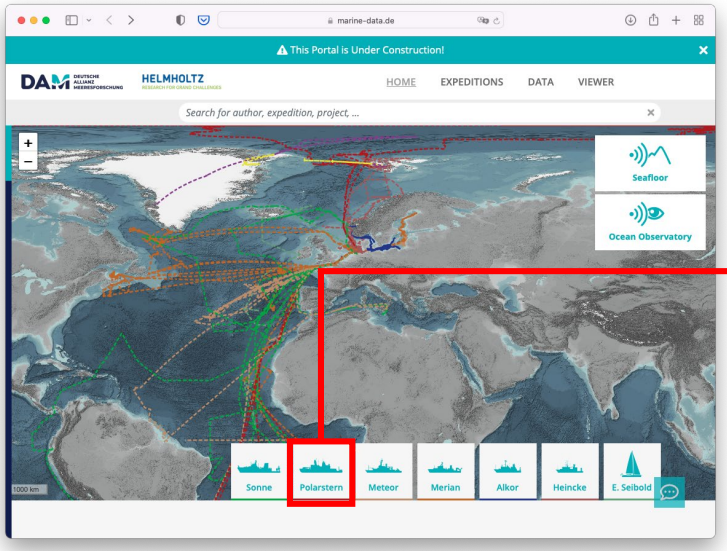
PIDs enable cross-references between the article and the dataset

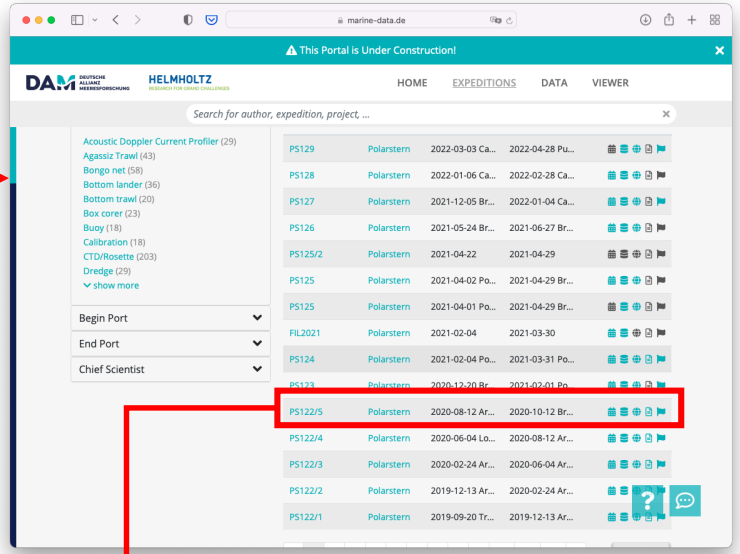


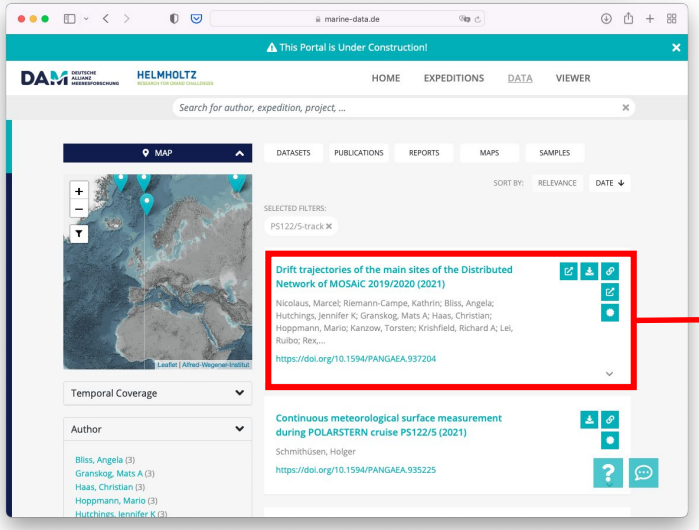
Source:
Elger, K. (2016).
https://os.helmholtz.de/fileadmin/user_upload/os.helmholtz.de/Workshops/rda_de_16_elger.pdf. S. 25

This is why:

https://marine-data.de/







Interaction between DOI, ORCID & Data

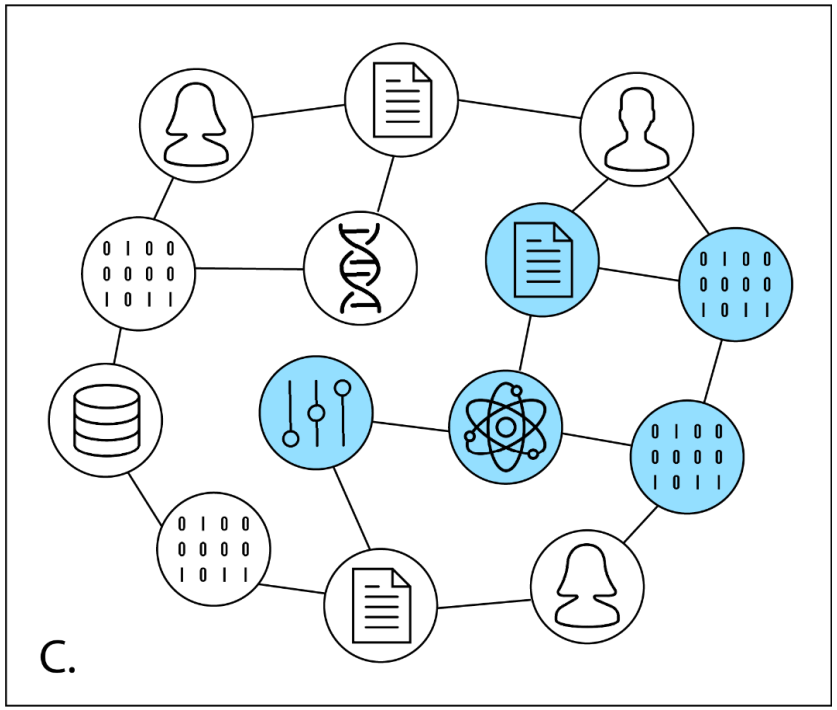
https://www.pangaea.de/

Best Practices Report of the ORCID integration in PANGAEA

This is why…

- **Persistent Identifier:** "unique universal persistent identifier" (Koster, 2020)
  - **"Identifier"** = a string used to refer to an object
  - **"Unique"** = means that the identifier is only used for one object
  - **"Universal"** = entails that the identifier is valid for the whole of the world or world wide web
  - **"Persistent" =** means that the identifier remains available independently of individual institutions, systems or system implementations

- References to potentially **any sort** of digital or non-digital **entity**
- Enable the **interlinking** between entities
- Contribute to the **integrity** of scientific communication and its **reproducibility**
- PIDs are central to make data **FAIR**.
- PID and their corresponding **metadata** provide a **comprehensive view** on all research process entities.



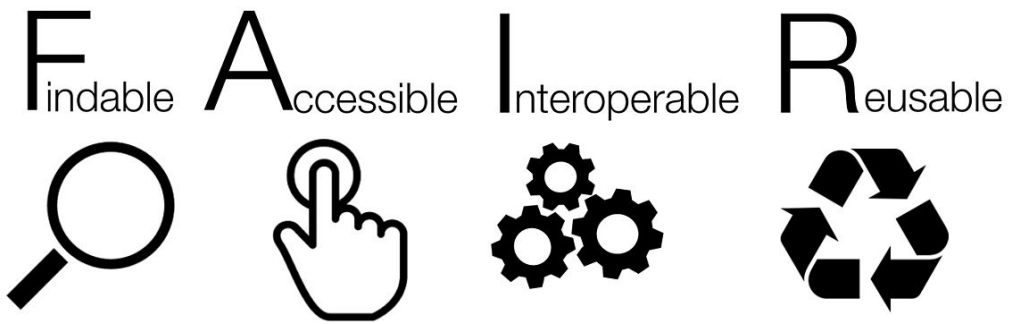
Source: "All digital objects connected to a research object." Fenner/Aryani (2019): Introducing the PID Graph. DOI: https://doi.org/10.5438/jwvf-8a66. CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/legalcode).

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

DataCite

Crossref

doi Foundation

ePIC
Persistent Identifiers for eResearch

ORCID
Connecting Research and Researchers

National

urn:nbn:de:1111-20091210269 urn:nbn:de:
v:11-100287 urn:nbn:de:hbz:468-2007038
1417541491 urn:nbn:de:bsz:21-opus-2952
nbn:de:101:1-2010080220 urn:nbn:de:027
6 urn:nbn:de:0012:bverwg-17962 urn:nb

Handle.Net® Registry

A heterogenous PID landscape

Research Activity Identifier

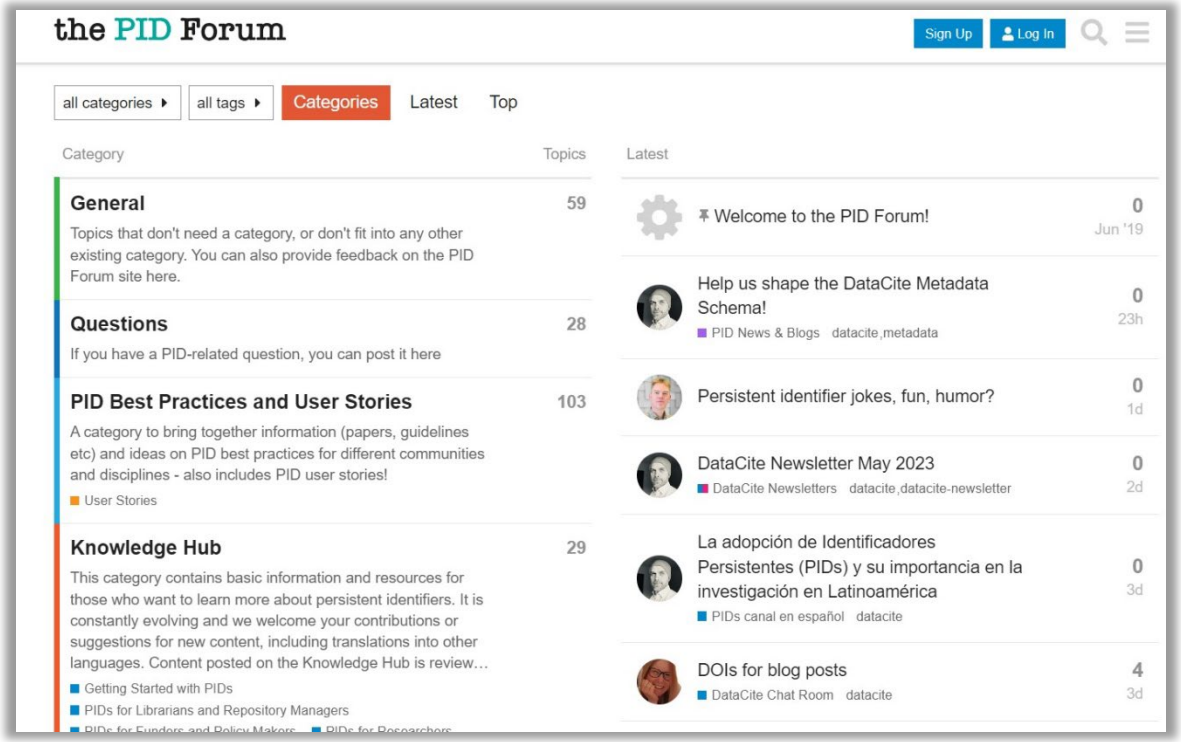
Identifing and tracking of research projects and activities
https://www.raid.org.au

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?



PID Network Germany

- 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:

DataCite CONNECTING RESEARCH, IDENTIFYING KNOWLEDGE
DEUTSCHE NATIONAL BIBLIOTHEK
HELMHOLTZ Open Science
TIB LEIBNIZ-INFORMATIONSZENTRUM TECHNIK UND NATURWISSENSCHAFTEN UNIVERSITÄTSBIBLIOTHEK
UNIVERSITÄT BIELEFELD Universitätsbibliothek
DFG

Community Building & Support

- 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

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

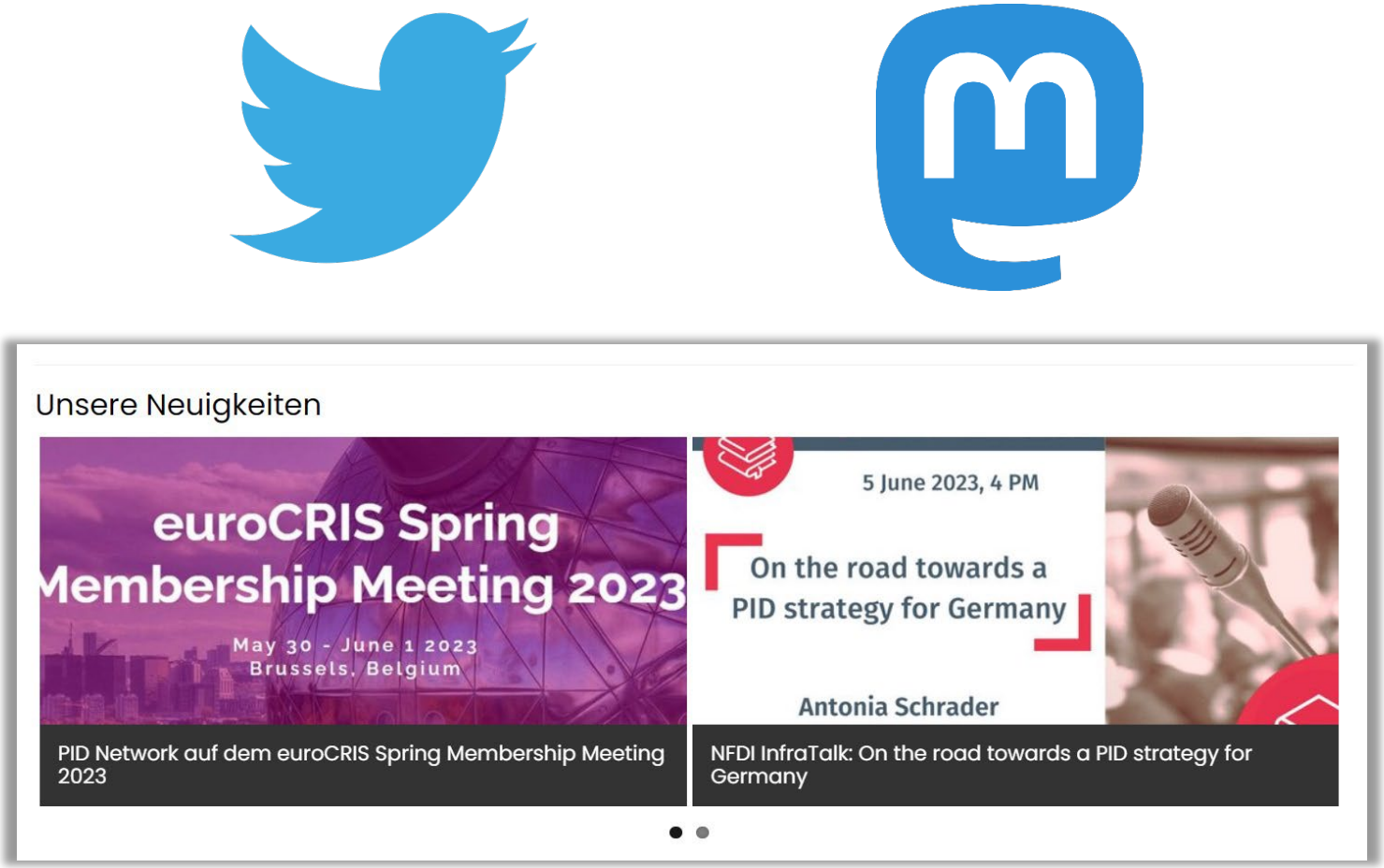
Social Media

- Mastodon

  @PIDNetworkDE@openbiblio.social

- Twitter

  @PIDNetworkDE



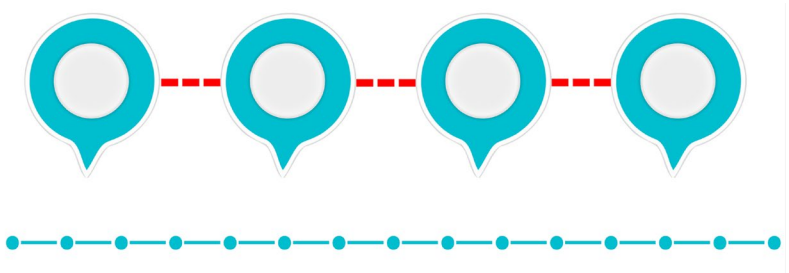
Analysis, Monitoring & Optimization

- 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 Repositories & Publication Platforms

PIDs for Text Publications

PIDs for Software

PID4NFDI

- 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:

DataCite GWDG Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen HELMHOLTZ Open Science TIB LEIBNIZ-INFORMATIONSZENTRUM TECHNIK UND NATURWISSENSCHAFTEN UNIVERSITÄTSBIBLIOTHEK

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

PID4NFDI

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

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

PID4NFDI will complement PID Network Germany –

Both projects agreed to closely collaborate.

PID NETWORK DEUTSCHLAND

Thank you for your Attention!

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