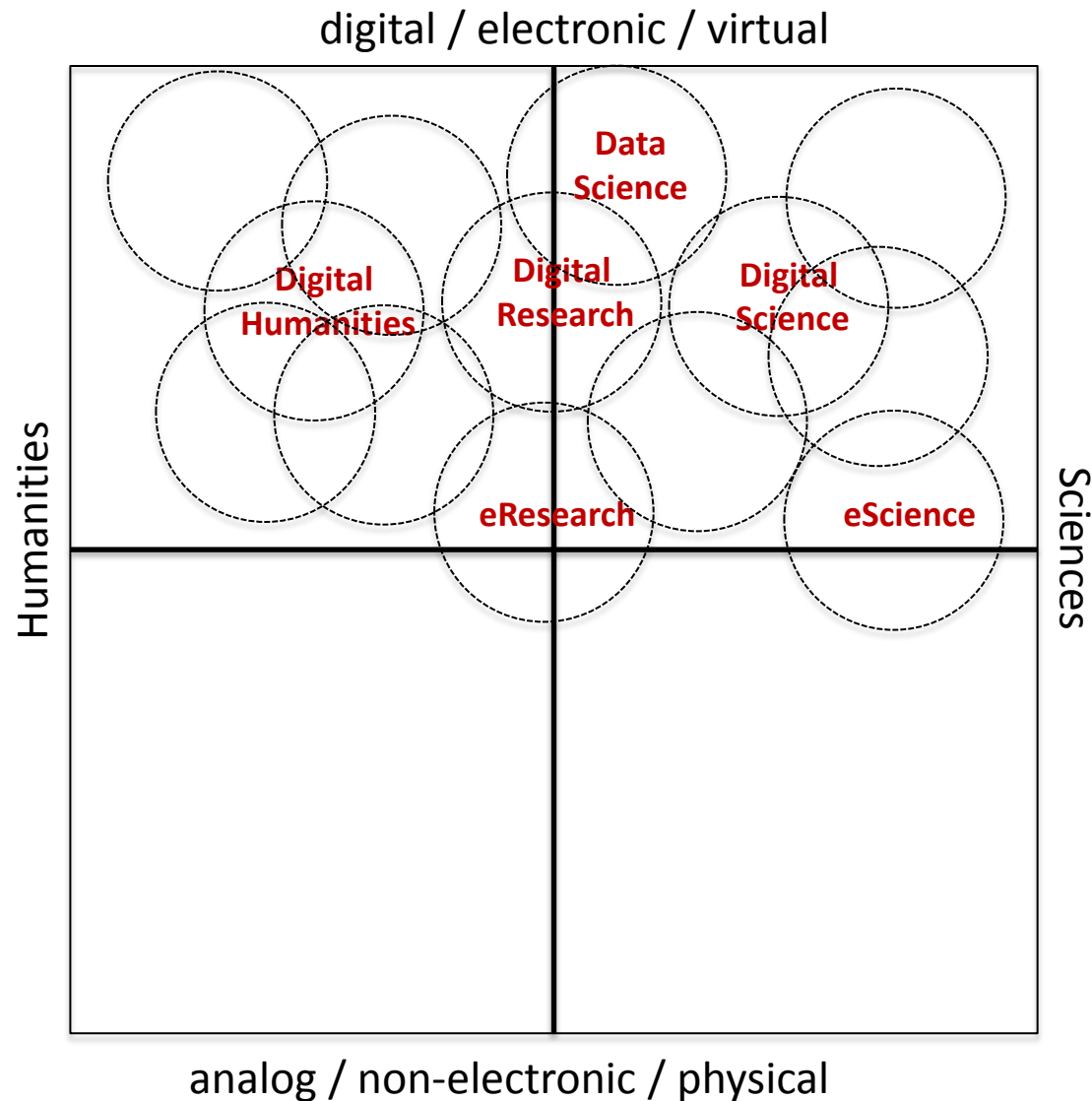


Reflections on Open Science strategies at local, national and European level

Wolfram Horstmann

INTRODUCTION

What I am not talking about



What I do not want to say

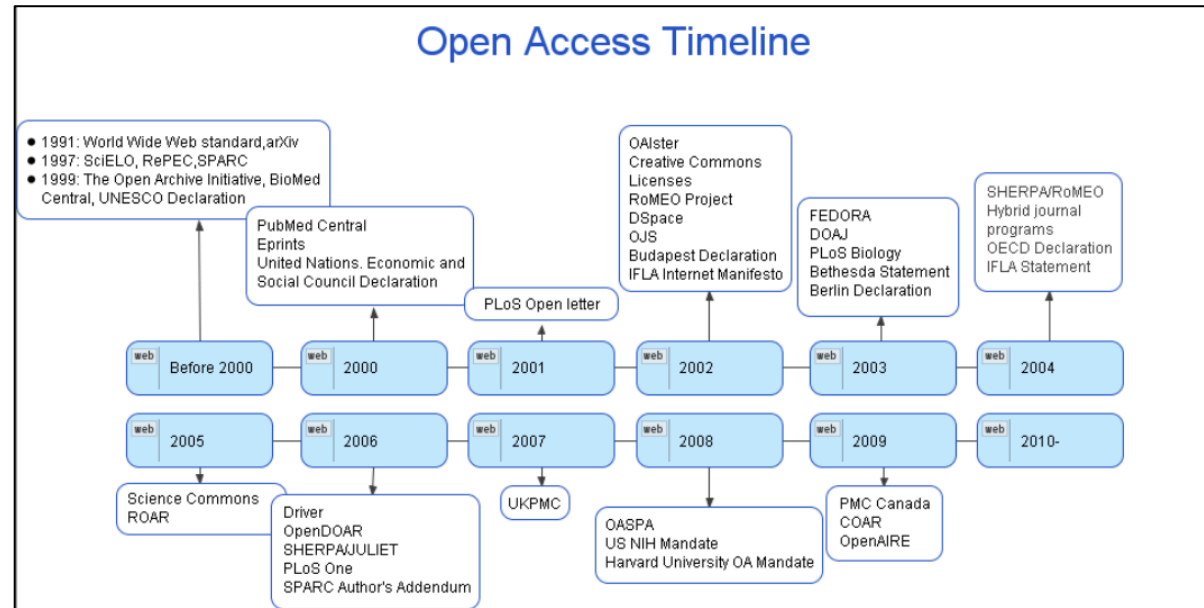
- Open Science is an end in itself
- Open Science can be prescribed
- Open Science does not need incentives
- Open Science comes with infrastructure
- Open Science is a political issue
- Open Science comes at no cost

The hat I am not wearing



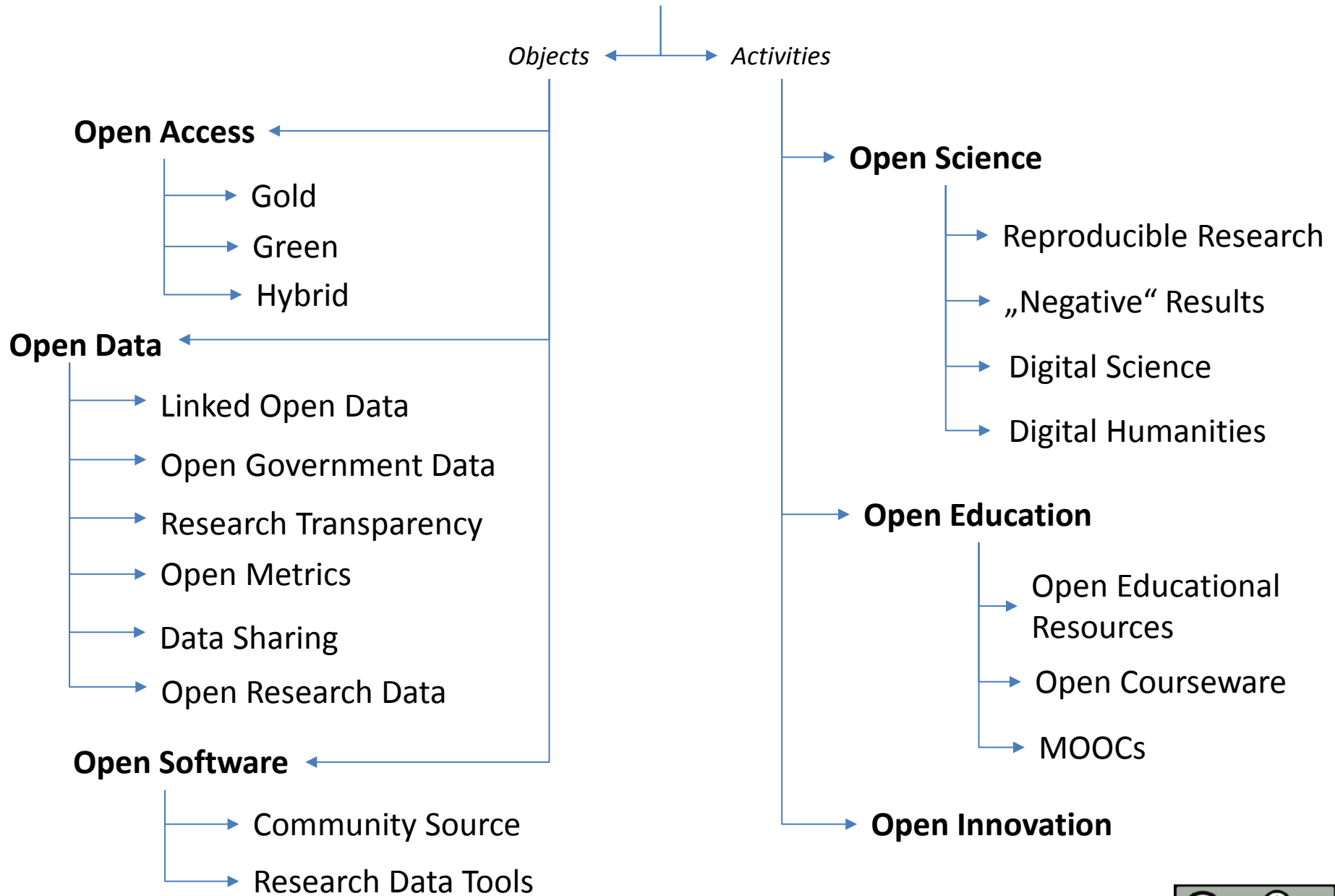
<https://www.flickr.com/photos/neutronboy/9788045101>

- Library Director
- Professor in Information Science
- Principal Investigator
- Committee Member
- Former Neuroscientist



CAN OPEN SCIENCE LEARN FROM OPEN ACCESS?

Open Academic Culture



Information Life Cycle

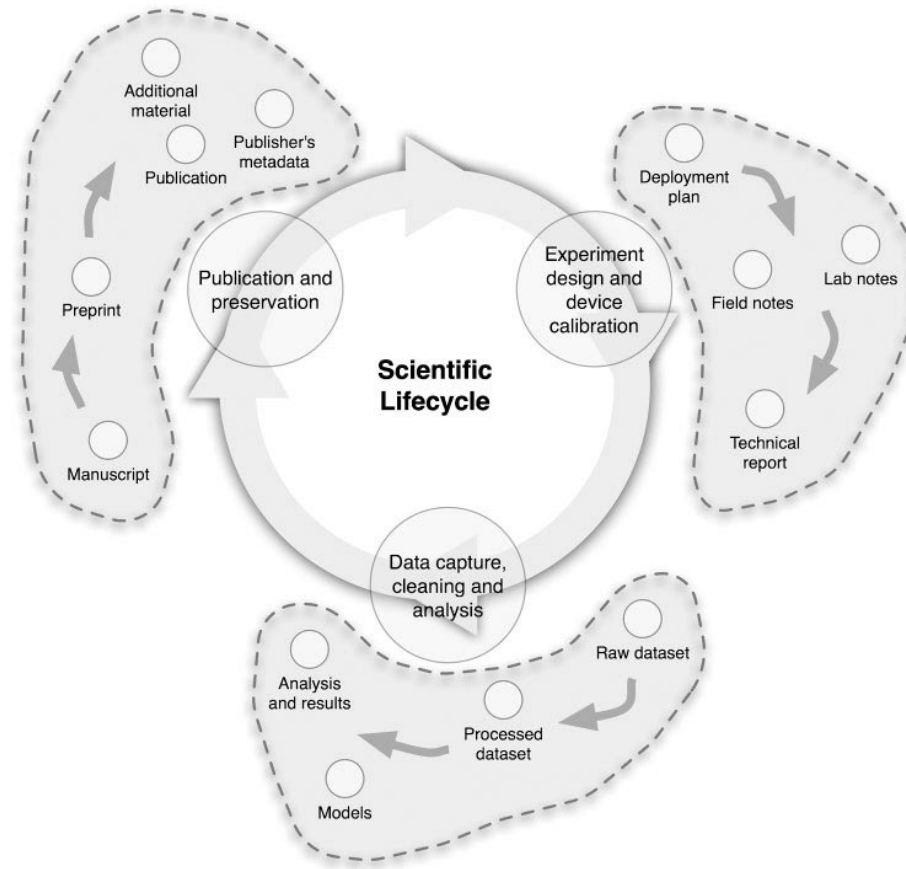
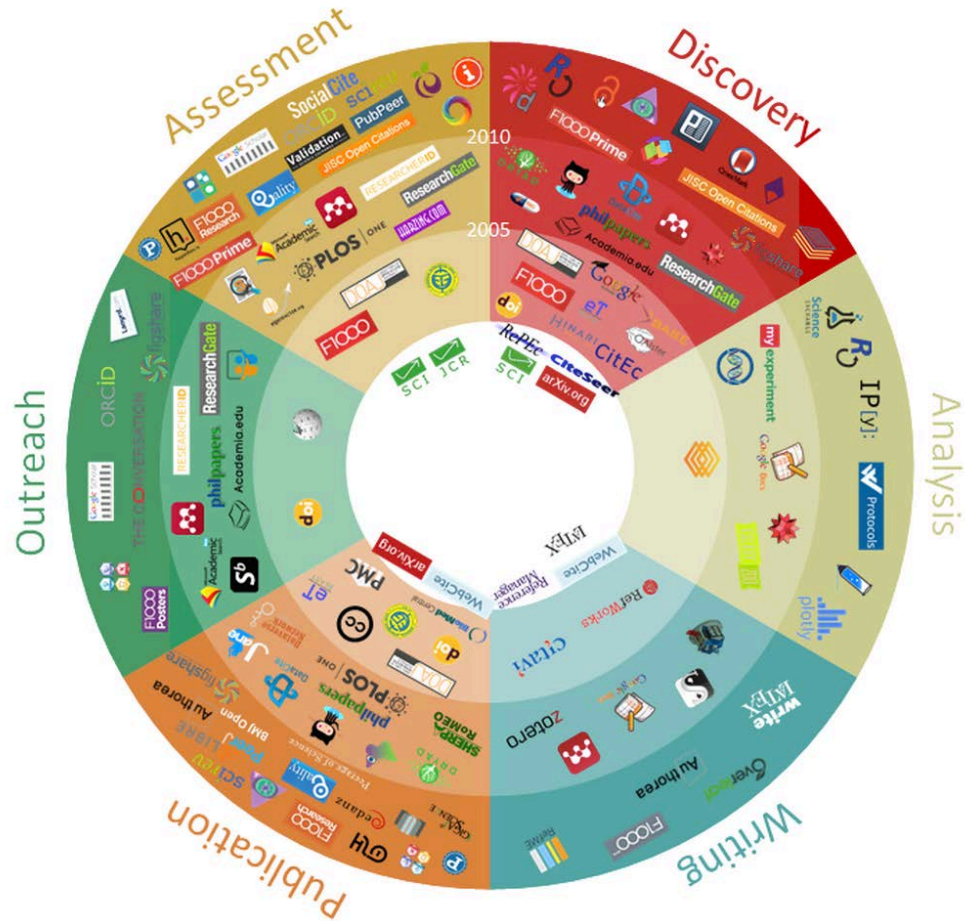


FIG. 3. The integrated scientific life cycle of embedded networked sensor research.

Pepe, A., Mayernik, M., Borgman, C. L., & Van de Sompel, H. (2009). From artifacts to aggregations: Modeling scientific life cycles on the semantic Web. JASIST. doi:10.1002/asi.21263 ; Preprint: <https://arxiv.org/abs/0906.2549>

Innovations in Scholarly Communications



Expectations drawn from OA

- OA could theoretically approach 100%
... what percentage can Open Science reach?
- OA became structural after c. 25 years
... Open Science becomes structural in 2035?
- If the structural effect of OA is a global repository system and a business model
... what does an Open Science system look like?
- If OA fixes the problem of access to scientific literature
... what is the problem Open Science fixes?
- If OA enhances research and education
... does Open Science contribute to the third mission?

OPEN SCIENCE LOCAL

Local Individuals



Vinodh Ilangovan

Max Planck Institute for Biophysical Chemistry

Research Fellow

Goettingen, Germany



I am a biomedical scientist working on biological clocks and sleep. I think about Open Science, Open Peer Review and Open Data as a means to achieve reproducibility in research. I am interested on how early career researchers can steer the evolution of research evaluation. I will be happy to discuss how open access enhances public literacy (scientific temper).

Local Groups



primate
cognition

Leibniz-ScienceCampus

About us

Research

Funding measures

Events

Services

Statistical

Home ▶ Research ▶ Open Science



Members of the ScienceCampus participating in the "Open Science Team" at the Göttinger Altstadtlauf 2017 to promote free access to scientific knowledge

Open Science

The modern knowledge-based society is driven by the constant innovation and scientific progress. The success of this future development rests critically on the integrity, reproducibility, and accessibility of research. The Open Science movement is thus dedicated to ensuring that scientific findings are trustworthy and replicable, to make the outcomes of research freely available to the scientific community, and to improve the dissemination of scientific results to the public.

Local Initiatives

RR
REPLICATION
WIKI

Navigation

Main

Community portal

Current events

In the news

In the literature

Recent changes

Random page

FAQ

Help

Toolbox

What links here

Related changes

Special pages

Printable version

Permanent link

Browse properties

ReplicationWiki

replication.uni-goettingen.de/wiki/index.php/Main_Page

Search

Log in / create account

Page

Discussion

Read

View source

View history


Go

Search

Welcome to
Replication in Economics!

8,566 articles

- Replication in economics
- Journal policies
- Replication in teaching
- Literature
- Links
- Replication in other fields of science
- Useful tools




Search:

Find one of
2,097 studies to
replicate

Browse in 144 journals,
29 Working paper series &
blogs and 18 books

Browse by methods,
software used, JEL codes,
keywords, authors, data
type,
geographical origin of data,
and data source

Find one of
360
replications
and 6
Corrections



Enter a new:

replication

replicated study

Study lacking replication

Find studies and
replications
for your own research.

7 of 11

About the project

For scientific progress, it is pivotal to review research findings by independently replicating results, thus making the findings more reliable. However, in econometric research, it is not yet common practice to publish replication findings. This wiki serves as a database of empirical studies, the availability of replication material for them and of replication studies. It can help teaching replication to students. Seminars at several faculties internationally were already taught for which the information of this database was used.

So far the focus has been on some leading journals in economics. Replication results can be published as


Join the project

You can join the project by [entering a new replication](#) or [empirical studies that could be replicated](#). For the latter you can vote which ones you find [most relevant to be replicated](#). Furthermore, you can improve the articles in the wiki and make comments. Under [current events](#) you can announce news and upcoming events. The [community portal](#) lists open tasks and suggestions for the wiki.

Most recently added replication studies

- 3 October 2017: [News Shocks and the Slope of the Term Structure of Interest Rates: Comment \(AER 2017\)](#)
- 3 October 2017: [The Cyclicalilty of Sales, Regular, and Effective Prices: Business Cycle and Policy Implications: Comment \(AER 2017\)](#)
- 1 October 2017: [Shy of the Character Limit: "Twitter Mood Predicts the Stock Market" Revisited \(EJW 2017\)](#)
- 1 October 2017: [A comment on "Three reasons to use annual payments in contingent valuation" \(J Env Econ & Management forthcoming\)](#)
- 29 September 2017: [The Power of Abortion Policy: Re-Examining the Effects of Young Women's Access to Reproductive Control \(JPE forthcoming\)](#)

News

AIRLEAP  Conference "An Urgency for Evidence and Transparency in Economic Analysis and Policy", St Louis, USA, October 13th-14th will have a session on replication in empirical economics

Local Meet-ups

- Initiated in December 2016
- Focus on Open Science topics: research data, publishing, peer review, research integrity, etc.
- Junior researchers, librarians, research management, HE didactics, from UGOE, Max Planck Institutes etc.
- Outreach primarily via graduate schools' mailing lists



Work mode

- Quarterly Meet-ups with short presentations & group discussions
- Working groups (monthly): Teaching Open Science, HackyHour

WIKIDATA do-a-thon

m mainzed
@_mainzed

Gute Nachricht! "[@DARIAHde](#) geo browser will support wikidata soon"

Najko Jahn @najkoja
Thank you @nichtich and @thebugoe
@DARIAHde geo browser will support wikidata for classic edition

04:09 - 15. Feb. 2018

2 Retweets 4 „Gefällt mir“-Angaben

Sicher <https://tools.wmflabs.org/scholia/sponsor/Q48693816>

Scholia Author Work Organization Venue Series Publisher Sponsor Award Topic About

Collaborative Research Centre 1002: "Modulatory Units in Heart Failure" (Q48693816)

Recently published sponsored work

Show 10 entries

Publication date	Number of citations	Work	Quote
2018-02-21	0	Electromechanical vortex filaments during cardiac fibrillation	

DARIAH-DE Geo-Browser

Load Data: Static Data, Please choose file... Load

Load Overlay: KML File URL, Load KML

Dataset Information: Magnetic Link 525901

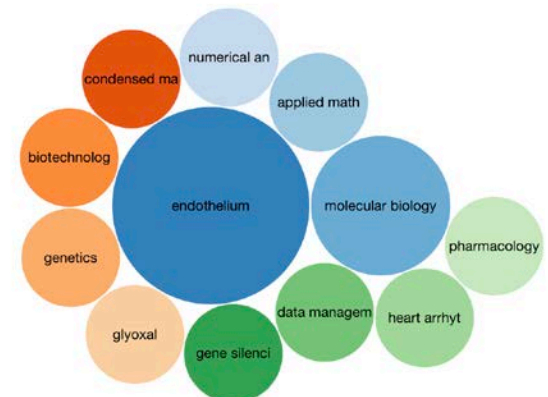
Background map: Open Street Map

Map selector tools: Filter, Publication Place, 246 results

Time start: 1617, Time unit: continuous, Scaling: normal, Animation: 246 results

© OpenStreetMap contributors
© OpenStreetMap contributors, CC-BY-SA

spatiotemporal car
tenin and GATA4 int
he adult heart.
dystrophy mutations
ation and assembly
s titin phosphorylati
gement for Comple
r an antigen in card
e to formaldehyde in
tractility by inhibiti



Diese Abfrage bearbeiten

Bubble chart - 12 Ergebnisse in 1121 ms

Universities: Delft

FEBRUARY 4, 2018



TU Delft Strategic Framework 2018-2024: what does it mean for Open Science?



TU Delft published its new [Strategic Framework 2018-2024](#) on 12 January, during the [Open Science Symposium](#) and its 176th birthday celebration.

The framework is entitled “Impact for a better society” and “openness” is listed as one of the four major guiding principles. The principle of openness was apparent already during the consultation phase of the framework: “more than 600 internal and external stakeholders have been actively participating” in the process.

Universities: Tilburg



UploadCommunities

Log inSign up

February 21, 2018

ProposalOpen Access

Preview



Action Plan Open Science for Tilburg University Strategy 2018-2021
February 21, 2018

Short description	Develop activities to stimulate Open Science

22

Tweeted by 28

See more details

Indexed in

OpenAIRE

Publication date:

February 21, 2018

DOI:

DOI 10.5281/zenodo.1182436

Keyword(s):

Open ScienceOpen AccessTilburg UniversityTilburgStrategy

License (for files):

 Creative Commons Attribution 4.0

Versions

Version 1 10.5281/zenodo.1182436 Feb 21, 2018

Open Science Local: Take-Aways

- Open Science starts at the individual researcher
- Groups focussing Open Science emerge
- Meet-ups for groups and individuals on campus foster local culture
- Universities take up Open Science in strategies

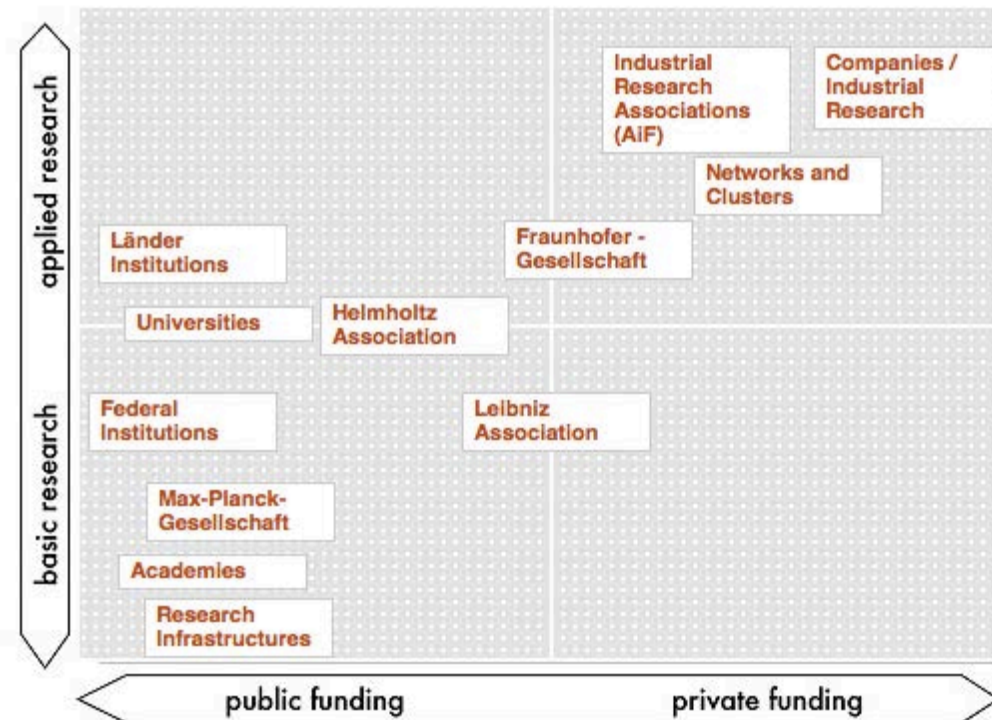
(Data Science has more traction than Open Science)

OPEN SCIENCE NATIONAL

Research Landscape in Germany

Research Performing Organisations

Find out about Germany's different types of research institutions: universities, universities of applied sciences, non-university research institutes, companies and federal as well as state (Länder) institutions. Profiles of each type of research organisation can be found here.



Facts & Figures



© DAAD/Volker Lannert

Biotechnology has become the basis and driving factor behind many applications in medicine, the food and feed industry and chemical industry.

Science and research in Germany are characterised by an excellent infrastructure, a wide variety of disciplines, well-equipped research facilities and competent staff. Germany offers various forms of research locations: **universities**, **non-university institutes**, **companies** and institutions run by **federal** or **state** (Länder) authorities. All in all, there are **nearly 1,000 public and publicly funded institutions of science, research and development in Germany**. They are joined by a large number of research and development (R&D) centres run by companies.

In selected fields or regions, these industrial and academic institutions pool their research and development activities in **networks and clusters** to work more efficiently and benefit from a higher level of knowledge in order to foster technology transfer and innovation. Furthermore, cooperation at European as well as international level has become an essential dimension of science and research in Germany.

Key Facts



Almost **1,000 public and publicly funded institutions** for science, research and development, approx. 450 research and innovation networks and clusters



604,000 staff in R&D including over 350,000 R&D researchers



German higher education institutions maintain over **34,000 international collaborative partnerships** with roughly 5,400 universities and research institutions in more than 150 countries.



Gross domestic expenditure on R&D (GERD): **84.5 billion euros** (2014)



Higher Education Institutions in Figures

The German Rectors' Conference (HRK) is the voluntary association of state (public) and state-recognised universities and other higher education institutions in Germany. The HRK currently has 268 member institutions. Around 94 % of all students in Germany are matriculated at these institutions.

Higher Education Institutions in Germany

Higher education institutions in total	399 ¹
Universities	121 ¹
Universities of applied sciences (FH)	220 ¹
Colleges of art and music	58 ¹

Higher education institutions by type of funding

State (public) higher education institutions	238 ¹
Non-state, state-recognised higher education institutions of which private	161 ¹
of which church maintained	40 ¹

Studies

Degree programmes in total by type of degree	17,731 ¹
Diplom (Uni)	144 ¹
Magister	44 ¹
Staatsexamen	1,677 ¹
Diplom (FH)	59 ¹
Bachelor's	7,817 ¹
Master's	8,833 ¹
Other degrees	157 ¹

Degree programmes by type of higher education institution

Universities	11,207 ¹
Universities of applied sciences (FH)	5,413 ¹
Colleges of art and music	1,111 ¹

Students

Students in total	2.7m ²
Women	1.29 ²
Men	1.41m ²
Proportion of foreign students	11.8 % ²

Students by type of higher education institution

Universities	1.73m ²
Universities of applied sciences (FH)	929,784 ²
Colleges of art and music	35,230 ²

First-year students in total in the academic year

Women	500,666 ²
Men	250,665 ²
Proportion of first-year students among the same-age population	250,001 ²
	57.3 % ³

Graduates

Degrees gained in total	436,420 ⁴
Women	221,587 ⁴
Men	214,833 ⁴
Proportion of foreign graduates	9.5 % ⁴

Graduates by type of degree

Diplom (Uni) and equivalent degrees	408,713 ⁴
Lehramt (teaching degree incl. BA and MA)	64,054 ⁴
Diplom (FH)	41,519 ⁴
Bachelor's	17,381 ⁴
Master's	207,401 ⁴
	78,358 ⁴

Doctorates

Women	27,707 ⁴
Men	12,256 ⁴
	15,451 ⁴

Habilitations in total

Women	1,567 ⁴
Men	429 ⁴
	1,138 ⁴

Staff

Staff in total at higher education institutions

Academic, research and artistic staff combined	662,076 ⁴
Full-time staff	369,847 ⁴
- Professors	233,259 ⁴
- Lecturers and assistants	45,013 ⁴
- Academic, research and artistic staff	3,693 ⁴
- Teaching staff for special purposes	174,701 ⁴
Temporary, part-time staff	9,852 ⁴
Administrative, technical and other staff combined	136,588 ⁴
	292,229 ⁴

Finances**Expenditure**

Higher education institutions in total (incl. university hospitals)	44.9bn euros ⁵
Universities (excl. university hospitals)	18.7bn euros ⁵
University hospitals	20.4bn euros ⁵
Universities of applied sciences (FH)	5.2bn euros ⁵
Colleges of art and music	0.6bn euros ⁵
Current expenditure on higher education institutions	40.2bn euros ⁵
Investment expenditure on higher education institutions	4.7bn euros ⁵

Income

Higher education institutions in total	44.9bn euros ⁵
Administrative income of higher education institutions (excl. university hospitals)	2.1bn euros ⁵
Administrative income of hospitals	13.9bn euros ⁵
Core funding for higher education institutions	22.1bn euros ⁵
Third-party funding for higher education institutions	6.7bn euros ⁵

Sources of third-party funding

German Research Foundation (DFG)	2.2bn euros ⁵
Federal Government	1.7bn euros ⁵
Länder	0.2bn euros ⁵
European Union	0.6bn euros ⁵
Foundations and similar sources	0.4bn euros ⁵
Business, industry and similar sources	1.3bn euros ⁵

Core funding

Core funding Federal States	21.8bn euros ⁶
Core funding Federal Government	4.9bn euros ⁶
Core funding: Expenditure of higher education institutions as a proportion of GDP	1.0 % ⁶
Current expenditure (core funding) per student	7,300 euros ⁵
Current expenditure (core funding) by average length of studies per graduate	30,000 euros ⁵

Internationality

Foreign students in Germany in total	218,848 ⁷
of which from: China	28,381 ⁷
Russia	11,126 ⁷
India	9,372 ⁷
Austria	9,305 ⁷

German students abroad in total	135,960 ⁵
of which in: Austria	32,192 ⁵
Netherlands	25,019 ⁵
Switzerland	14,352 ⁵
United Kingdom	13,720 ⁵
United States	9,819 ⁵
France	6,400 ⁵

International Comparisons**First-year student rate for the same-age population***

Russia	69 % ⁸
United Kingdom	67 % ⁸
Germany	53 % ⁸
Japan	52 % ⁸
Italy	47 % ⁸
France	41 % ⁸

Spending on tertiary sector education institutions as a percentage of GDP

Canada	3.0 % ⁹
United States	2.7 % ⁹
Japan	1.6 % ⁹
France	1.5 % ⁹
Russia	1.4 % ⁹
Germany	1.3 % ⁹
United Kingdom	1.2 % ⁹
Italy	1.0 % ⁹

Research

Total higher education institution expenditure on R+D	14.0bn euros ⁵
--	----------------------------------

Third-party funds

Third-party income of higher education institutions in total	6.7bn euros ⁵
--	--------------------------

Third-party funds by type of higher education institution

Universities (excl. university hospitals)	4.6bn euros ⁵
University hospitals	1.6bn euros ⁵
Universities of applied sciences (FH)	0.4bn euros ⁵

Third-party funds per professor

Higher education institutions in total	167,500 euros ⁵
Universities (incl. university hospitals)	285,900 euros ⁵
Universities (excl. university hospitals)	243,700 euros ⁵
Universities of applied sciences (FH)	27,100 euros ⁵
Colleges of art and music	15,100 euros ⁵

Source and Period under Review

¹ German Rectors' Conference (HRK): Higher Education Compass, Summer Semester 2015

² Federal Statistical Office: Winter Semester 2012/2013, (provisional)

³ Federal Statistical Office: as per November 2014

⁴ Federal Statistical Office: 2013

⁵ Federal Statistical Office: 2012

⁶ Federal Statistical Office: 2013, (provisional)

⁷ Federal Statistical Office: Winter Semester 2013/2014

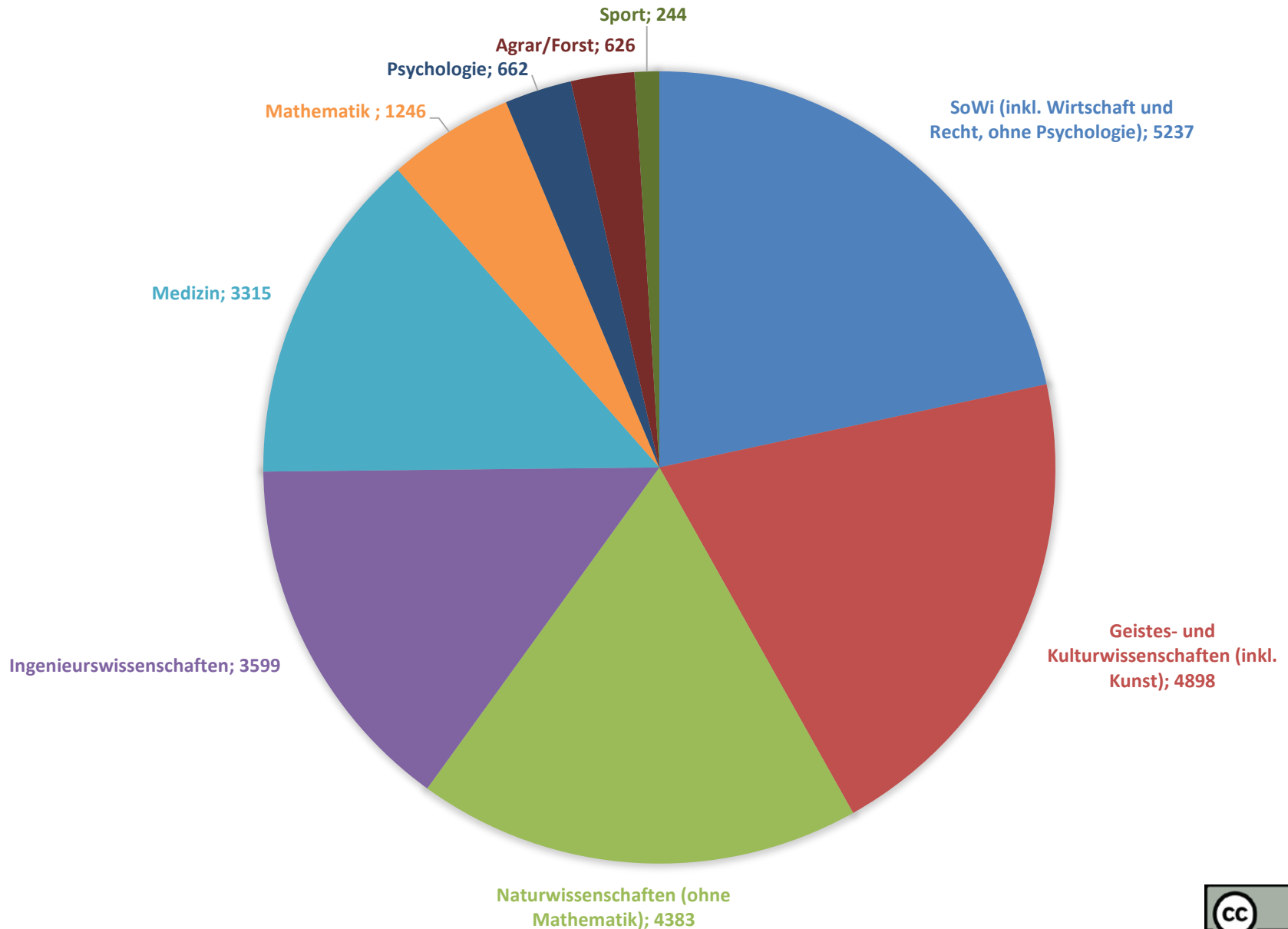
⁸ OECD: Education at a Glance: 2012

⁹ OECD: Education at a Glance: 2011

* Limited comparability due to the differing degrees of academisation in the individual vocational training programmes.

WISSENSCHAFTSLANDSCHAFT – PROFESSUREN IN DEUTSCHLAND

QUELLE: DESTATIS 2015







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[jacob\(at\)leibniz-gemeinschaft.de](mailto:jacob(at)leibniz-gemeinschaft.de)

[Start](#) »
 [Research](#) »
 [Open Science](#)

► [Scientific Profile](#)

► [Leibniz ScienceCampi](#)

► [Leibniz Research Alliances](#)

► [Leibniz Networks](#)

► [Cooperation with Universities](#)

▼ [Open Science](#)

[Open Access](#)

[Leibniz Open](#)

[Open Access Publishing Fund](#)

Open Science

The “Open Science” principle aims to make academic processes publicly accessible, understandable and usable. To this end, a variety of approaches are pursued, such as Open Access, Open Source, Citizen Science and Open Educational Resources. As various statements from the European Union and the G7 show, Open Science is gaining in importance within the sphere of academic policy at the European and international level. The Leibniz Association and its member institutes support this development and help shape it. For example, they have been championing [Open Access](#) - free access to academic publications - for many years now with a variety of activities.



DOWNLOAD

[Leibniz Association's Commitment to the European Open Science Cloud Declaration](#)

[Tsukuba Communiqué](#)



„Open inquiry is at the heart of the scientific enterprise.“

„Science as an open enterprise“, Report der Royal Society, 2012

Empfehlungen zu wissenschaftlicher Software

Um die Zugänglichkeit und Nachnutzung von wissenschaftlicher Software zu verbessern, hat der Arbeitskreis Open Science „Empfehlungen zur Implementierung von Leit- und Richtlinien zum Umgang mit wissenschaftlicher Software an den Helmholtz-Zentren“ erarbeitet. [Mehr...](#)

Helmholtz Open Science Newsletter vom 31.01.2018

Der 66. Helmholtz Open Science Newsletter ist erschienen. In diesem Newsletter geben wir Ihnen einen Überblick über die wichtigsten Entwicklungen zum Thema Open Science. [Mehr...](#)

Open Science in der Helmholtz-Gemeinschaft

[\[in English\]](#)

Der Begriff Open Science bezeichnet einen kulturellen Wandel in der wissenschaftlichen Arbeitsweise und Kommunikation. Computergestütztes Arbeiten und digitale Kommunikation ermöglichen einen effektiveren und offeneren Informationsaustausch innerhalb der Wissenschaft und fördern den Transfer der Ergebnisse in die Gesellschaft. Der offene, durch möglichst wenige finanzielle, technische und rechtliche Hürden behinderte Zugang zu wissenschaftlichen Publikationen, Forschungsdaten und wissenschaftlicher Software erweitert die Transparenz und die Möglichkeiten zur Qualitätssicherung wissenschaftlicher Arbeit, erhöht durch eine verbesserte Informationsversorgung die Leistungsfähigkeit der Wissenschaft und steigert durch die Erleichterung des Wissenstransfers in Wirtschaft und Gesellschaft die auf wissenschaftlichen Erkenntnissen basierende Innovation.

RSS-Feeds & Twitter

[Aktuelles aus dem Projekt](#)

[Literaturhinweise](#)

[Twitter](#)

Newsletter

Aktuelle Ausgabe des
[Helmholtz Open Science Newsletters](#)

Allianz der deutschen Wissenschaftsorganisationen

Schwerpunktinitiative „[Digitale Information](#)“



OPEN ACCESS AT THE MAX PLANCK SOCIETY



NEWS



Impressions from OpenCon 2017

March 06, 2018

150 Ambassadors of good practice in science

January 23, 2018

eLife welcomes early-career researcher to its Board of Directors

January 12, 2018

Divest of subscriptions, invest in Open Access!

October 25, 2017

Max Planck researchers resign from Elsevier journals in push for nationwide open access

October 16, 2017

LOOKING BACK TO OPENCON 2017



THE COUNCIL



FACTS



DOCUMENTS



DATES



CONTACT

"The Federal Government wants to accelerate the digital transition in science through the National Digital Agenda. The new Council for Scientific Information Infrastructures will help towards that goal."

(Johanna Wanka, Federal Minister of Education and Research, 2014)

Preview: 12th Council meeting on June 22/23, 2018 in Dresden



© Universität Göttingen/Jan Vetter



**Rfil Recommendations 2016:
Performance through Diversity**

833.92 KB

[Download](#)

In Summer 2016, the Rfil published its policy paper "Performance through Diversity" and submitted recommendations concerning structures, processes, and financing for research management in Germany to the Joint Science Conference (GWK). To bring about the transition towards a system of sustainable information infrastructures, the Council will continuously engage with this complex process by giving recommendations for a framework in science policy.

TO FACILITATE AND ACCELERATE DIGITAL TRANSFORMATION IN THE SCIENCES ON A NATIONAL LEVEL

The Council monitors transitions in the German academic system at large and gives practical recommendations to academia and the government. Specifically it

- › provides foresight on the development of digital science;
- › promotes coordination of existing activities;
- › identifies potential synergies between the diverse actors and new fields of action;
- › intends to stimulate cooperation within the academic system;
- › monitors international policy developments.

ENHANCING RESEARCH DATA MANAGEMENT: PERFORMANCE THROUGH DIVERSITY

Recommendations regarding structures, processes, and financing
for research data management in Germany



Recommendations on RDM

- Adjusting funding mechanisms
- National Research Data Infrastructure
- Responsible data culture
- Comprehensive human resources development
- Stronger international ties
- Actively steering the transition

National Research Data Infrastructure

- Research-driven: „Wissenschaftsgeleitet“
- Subject Specific
- Consortial
- Mixture of Infrastructure and research stakeholders

Forschungsinfrastrukturen für die Geisteswissenschaften

Einladende zum Workshop

Folgende Organisationen und Verbände laden zu dem Workshop ein:

- Markus Bieswanger (Präsident, Gesellschaft für Angewandte Linguistik)
- Wolfram Drews (Präsident, Mediävistenverband)
- Friederike Fless (Präsidentin, Deutsches Archäologisches Institut)
- Martin Grötschel (Union der deutschen Akademien der Wissenschaften)
- Nikolaus Himmelmann (1. Vorsitzender, Gesellschaft für bedrohte Sprachen)
- Erhard Hinrichs (Wissenschaftlicher Koordinator, CLARIN-D)
- Wolfram Horstmann (Wissenschaftlicher Koordinator, DARIAH-DE)
- Eva Schlotheuber (Vorsitzende) und Mareike König (Sprecherin AG Digitale Geschichtswissenschaften), Verband der Historiker und Historikerinnen Deutschlands
- Nine Miedema (Vorsitzende, Gesellschaft für Hochschulgermanistik im Deutschen Germanistenverband)
- Claudine Moulin (Mitglied des Vorstands, Digital Humanities im deutschsprachigen Raum)
- Ingo Plag (1. Vorsitzender, Deutsche Gesellschaft für Sprachwissenschaft)
- Klaus Schneider (Vorsitzender, Deutscher Anglistenverband)
- Angela Schrott (Vorsitzende, Deutscher Romanistenverband)
- Monika Wingender (Vorsitzende, Deutscher Slavistenverband)
- Heike Zinsmeister (Vorsitzende, Gesellschaft für Sprachtechnologie und Computerlinguistik)



Deutscher
Anglistenverband



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



digital humanities im
deutschsprachigen raum



Gesellschaft für
Angewandte Linguistik e.V.



Gesellschaft für bedrohte
Sprachen e.V.



DEUTSCHER
Gesellschaft für Hochschulgermanistik
GERMANISTENVERBAND



Mediävistenverband e.V.



Alliance of Science Organisations in Germany



The Alliance of Science Organisations in Germany is a union of the most important German research organisations. It issues statements relating to research policy and funding and the structural development of the German research system.

Members of the Alliance include the Alexander von Humboldt Foundation, the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), the Fraunhofer-Gesellschaft, the German Academic Exchange Service, the German Council of Science and Humanities (Wissenschaftsrat), the German National Academy of Sciences Leopoldina, the German Rectors' Conference, the Helmholtz Association of German Research Centres, the Leibniz Association, and the Max Planck Society.

Shaping digital transformation in science.

Digital Transformation

- Scientific publication system
- Digital tools — software and services
- Digital collections of data and text corpora
- Federated IT infrastructure
- Digital learning, teaching and networking
- Digitally qualified staff
- Legislation for science in the digital age
- Scientific practice

Mission statement 2018 - 2022

<http://gfzpublic.gfz-potsdam.de/pubman/item/escidoc:2829904>



„Open Access repositories, their relationship with institutional research information systems, their potential for Open Science and alternative supply routes are also a reality which must not be disregarded in the course of future conceptual work in this area.“



Bundesministerium
für Bildung
und Forschung



Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

MINISTÈRE
DE L'ENSEIGNEMENT
SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'INNOVATION



Ministerie van Onderwijs, Cultuur en
Wetenschap

Press release

For release: 1st December 2017, 18:00 / 6 pm ***

1 December 2017
129/2017

Progress towards the European Open Science Cloud

**Germany and the Netherlands establish office for the GO FAIR Initiative /
France joins**

Government, e.g. coalition contract

„With a national research data infrastructure, we aim to systematize scientific data resources and ensure sustainable access. In this way, we also strengthen our research system for international competition.“

1389	Wir wollen mit einer nationalen Forschungsdaten-Infrastruktur wissenschaftliche Da-
1390	tenbestände systematisieren und einen nachhaltigen Zugang sicherstellen. So stär-
1391	ken wir unser Wissenschaftssystem auch für den internationalen Wettbewerb. Wir

Open Science National: Take-Aways

- Open Science as focal area in some research organisations
- OA more dominant than Open Science
- Digital transformation as an encompassing theme
- Investments most likely through research data

(Open Science rather as *modus operandi*)

OPEN SCIENCE EUROPE

Digital Science

Definition:

Digital science means a radical transformation of the nature of science and innovation due to the integration of ICT in the research process and the internet culture of openness and sharing. It is more open, more global and collaborative, more creative, and closer to society. It relies on the use of e-infrastructures, i.e. ICT-based services and tools for data- and computing-intensive research in virtual and collaborative environments.

Digital Science in Horizon 2020 <https://ec.europa.eu/digital-single-market/en/news/digital-science-horizon-2020>



Open Science

This is the ongoing transition in how research is performed and how knowledge is shared. News, events, publications related to Open Science

[Home](#) [Open Access](#) [European Open Science Cloud](#) [Open Science Policy Platform](#) [Groups](#) [Open Science Monitor](#)

European Commission Open Research Publishing Platform

The Commission proposes to fund a European Commission Open Research Publishing Platform. The main aim of this platform is to offer Horizon 2020 beneficiaries a free and fast publication possibility for peer reviewed articles as well as pre-prints resulting from Horizon 2020 funding. The attached note contains more information about this action which is foreseen to be launched in early 2018 through a public procurement process.

- [Information Note: towards a Horizon 2020 platform for open access](#) 205 KB

G7 Science Ministers committed to giving incentives for open science and to providing research infrastructures on the basis of FAIR data

The G7 Science Ministers met in Venaria (Italy) on September 28th and they discussed how the G7 nations could lead efforts to materialise the benefits of the Next Production Revolution. In this context, the G7 Ministers also recognized that technological and societal developments are transforming research towards paradigms of open science. They stressed the importance of incentivising and rewarding Open Science activities and providing global research infrastructures which would allow for an optimal re-use of data on the condition that we can make this data FAIR(Findable, Accessible, Interoperable and Re-usable).

Events

13 March 2018, BOULOGNE SUR MER, France - [Blue biotechnologies – what are the challenges for the future?](#)

28-30 May 2018, Jülich, Germany - [International Conference on Electron Beam Shaping in Space and Time](#)

9-14 July 2018, Toulouse, France - [EuroScience Open Forum](#)

[See all Events](#)

Workshops

- [Governance and funding of the EOSC, 29 June 2016](#)
- [Stakeholder workshop, 30 November 2015](#)

EC Strategy Implementation

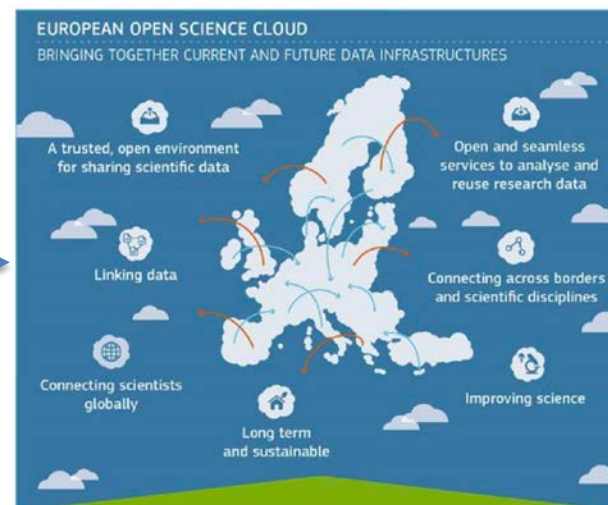
Digital Single Market

The Digital Single Market strategy aims to open up digital opportunities for people and business and enhance Europe's position as a world leader in the digital economy.

A European strategy for Open Science

The European Commission has launched the "[European Cloud Initiative](#) - Building a competitive data and knowledge economy in Europe" to endorse Open science. It will enable researchers to process the huge amounts of scientific data generated by research and to share their scientific results while improving access to knowledge and thus, innovation.

More information is available on the [European Open Science Cloud](#) webpage.



EC Strategy Alignment

- Open Science Policy Platform
- ESFRI - European Strategy Forum for Research Infrastructures
- eIRG - e-Infrastructure Reflection Group
- ERAC – European Research Area and Innovation Committee
- COMPET - Competitive Council

National-EC-Alignment

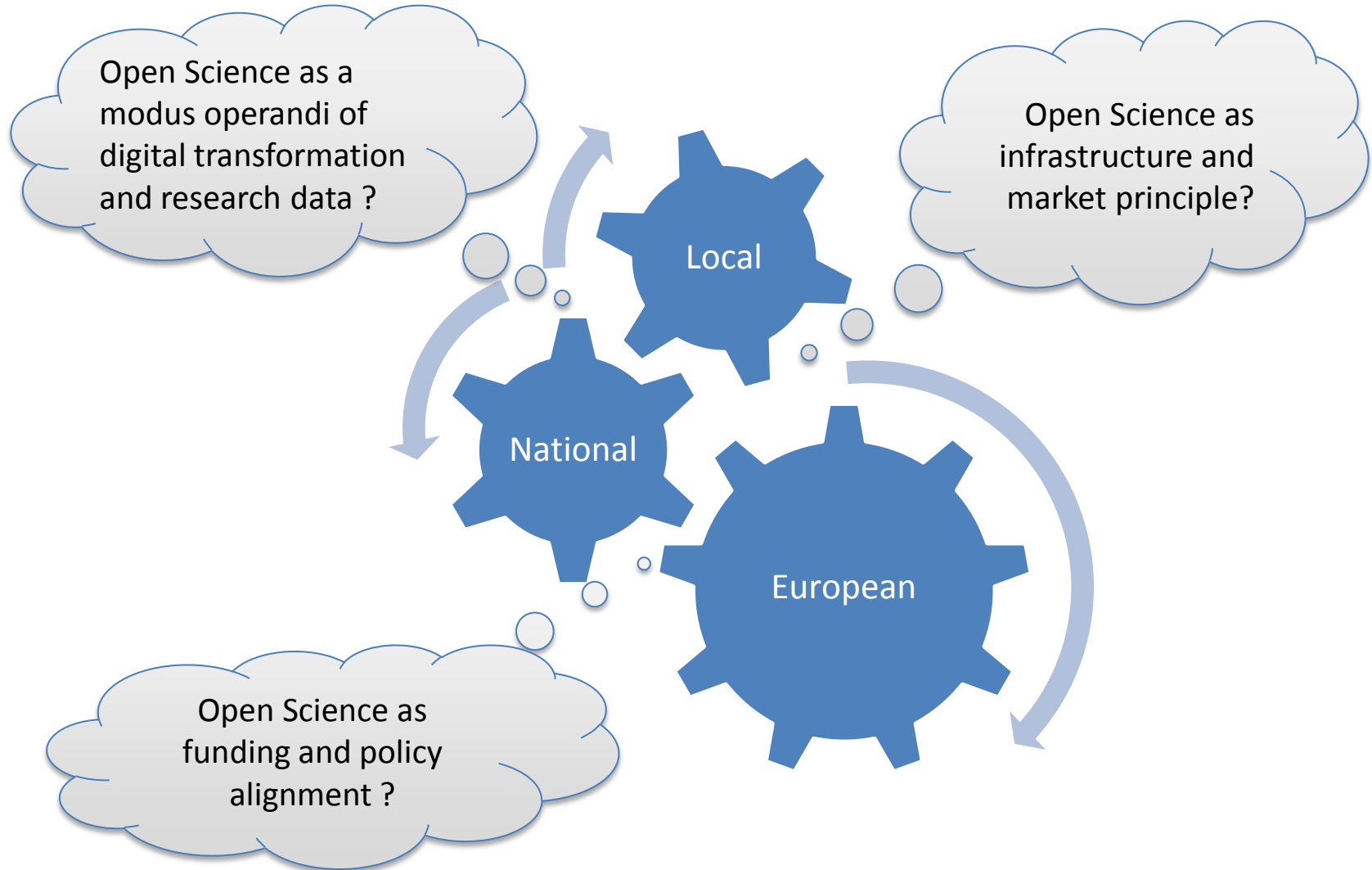
- For example, EOSC discussions in the Alliance of Science Organisations in Germany
 - General acknowledgement and endorsement
 - Clarifications requested
 - Scientific Success Criteria
 - Participative Governance
 - Voluntary Uptake
 - Devolved Alignment
 - Sustainable Financing
- “Out-kinds” of ERICs in ESFRI?

Open Science Europe: Take-Aways

- Open Science a dedicated strategic focus
- OA as a subsumption
- Strong relation to market strategy
- Intensive political alignment
- Implementation projects underway

REFLECTIONS

Open Science Local-National-European



All levels face the challenge of bridging the last mile!

What I do want to say

- Open Science

- ... is eventually a local process, not an end in itself

- ... should be based on voluntary participation

- ... requires time to develop reward systems

- ... has a cost in extra work for researchers investing in sharing

- ... is a cultural, not a political or infrastructural issue

- ... will blossom, if local, national, and European activities focus on bridging the last mile

- ... is action of individual researchers

Focal points for Open Science

- a. Focus Open Science on the long-tail of research as representing the innovative vertices between disciplines
- b. Focus Open Science on Universities as representing the wider diversity of research and teaching
- c. Focus on local libraries and IT Services as the conductor of the last mile

RDA Long Tail Recommendations

1. Recognize and understand the diversity of data
2. Scale existing funding mechanisms to support research data management for small research projects
3. Expand and strengthen the institutional role in managing research data
4. Develop and apply common standards across institutions and domains to ensure greater interoperability across datasets
5. Support reproducibility and transparency of research by linking data, software, and literature.
6. Establish governance structures that reflect the diverse dimensions of research data.
7. Develop coherent principles and policies for the collection and preservation of long tail data

Role of Universities

Pre-RDA Symposium, 'The critical role of university RDM infrastructure in transforming data to knowledge'

All over the world universities and libraries have started the task of developing research data services. Ideally such initiatives aim to result in a complete service portfolio covering the entire research lifecycle: Support in writing proposals and data management plans, repository infrastructures for the storage of data, support in publishing data, assignment of persistent identifiers, lecturing in data management, etc. This broad scope means that such services are often seen as requiring a joint effort from university, library, IT center, faculties and other stakeholders.

Currently nowhere in the world such a complete support scenario has been established. It is timely for actors in the various dimensions of such initiatives internationally to share their experiences, research and insights.

In this symposium we will explore the topic and hear research papers, practice papers and lightening talks from organisations that have started to offer such services in whole or in part on their campus. The symposium will provide a forum for universities and libraries to share their experience and to learn from each other.

The symposium will take place in Göttingen from 18-20 March 2018: it is a collaboration between the University of Göttingen and CODATA and is intended as a precursor event to the RDA plenary meeting in Berlin on 21-23 March 2018.

<http://www.eresearch.uni-goettingen.de/content/pre-rda-symposium>

THANKS