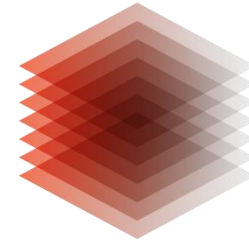

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TIB

A Specialised Information Service for Physics

Dr. Holger Israel, Dr. Esther Tobschall and Julia Hoffmann

March 19th 2024

87. Jahrestagung der DPG und DPG-Frühjahrstagung der Sektion Kondensierte Materie

Agenda

1. Who are we? – A brief overview of the TIB

- **Some facts about the TIB**
- **How you can use the TIB**
- **Selected TIB services**

2. What is a specialised information service?

- **General explanation**
- **Our plan for the specialised information service for physics**

3. World café (interactive workshop)

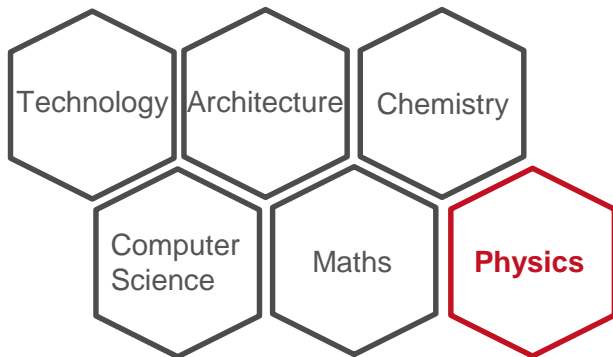
- **Short introduction**
- **Conversations**

Who are we? – A brief overview of the TIB

Some facts about the TIB

The TIB – Leibniz Information Centre for Science and Technology and University Library is the **German National Library of Science and Technology** and the world's largest special library for natural sciences and technology. It enables access to unique data collections.

Focal points of the collection



Holdings



Total media	9.9 M
Books	6.06 M
Share of grey literature	62%
Total journal subscriptions	61589
Journal holdings TIB-only in Germany	65%
Databases	6442
Total shelf length	213 km

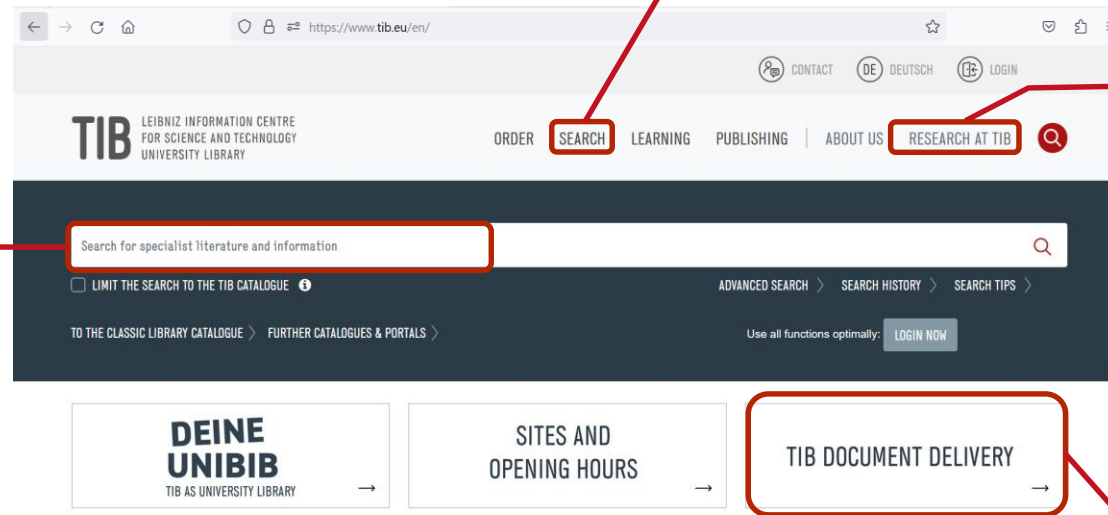
People



Number of employees	616
Users per year	874.100

Who are we? – A brief overview of the TIB

How you can use the TIB: www.tib.eu



Start your search for specialised information (you can limit the search results to the TIB's holdings); **included** are books (with chapters from books), journals (with individual journal articles), dissertations, conference proceedings, microfilms and microfiches, CD-ROMs and DVDs and links to electronic publications

Here you can find the **subject gateways** (these provide more information on your subject area, such as useful links and access to specialised databases)

To develop its services, TIB carries out **applied research** and development in order to help shape the transformation towards the digitisation of science and technology with the aid of digital services.
 → enable innovative, efficient and seamless access to data, information and knowledge
 → to structure large information spaces, making them optimally accessible.
 There are currently over 40 ongoing projects at the TIB

Do you need a subject-specific article quickly for your work, but do not have direct access to the relevant medium on site or do not have your own library that can provide you with the required literature?

Just register for the **TIB document delivery service!**

- fast delivery of copies from printed publications (journal articles and partial copies from monographs)
- lending and sending of all media that can be borrowed from the TIB
- direct access to electronic full texts in free, open access or as national, alliance and consortium licences
- digital sale of individual articles (pay-per-view)

Who are we? – A brief overview of the TIB

Selected TIB services

B!son (<https://service.tib.eu/bison/>)

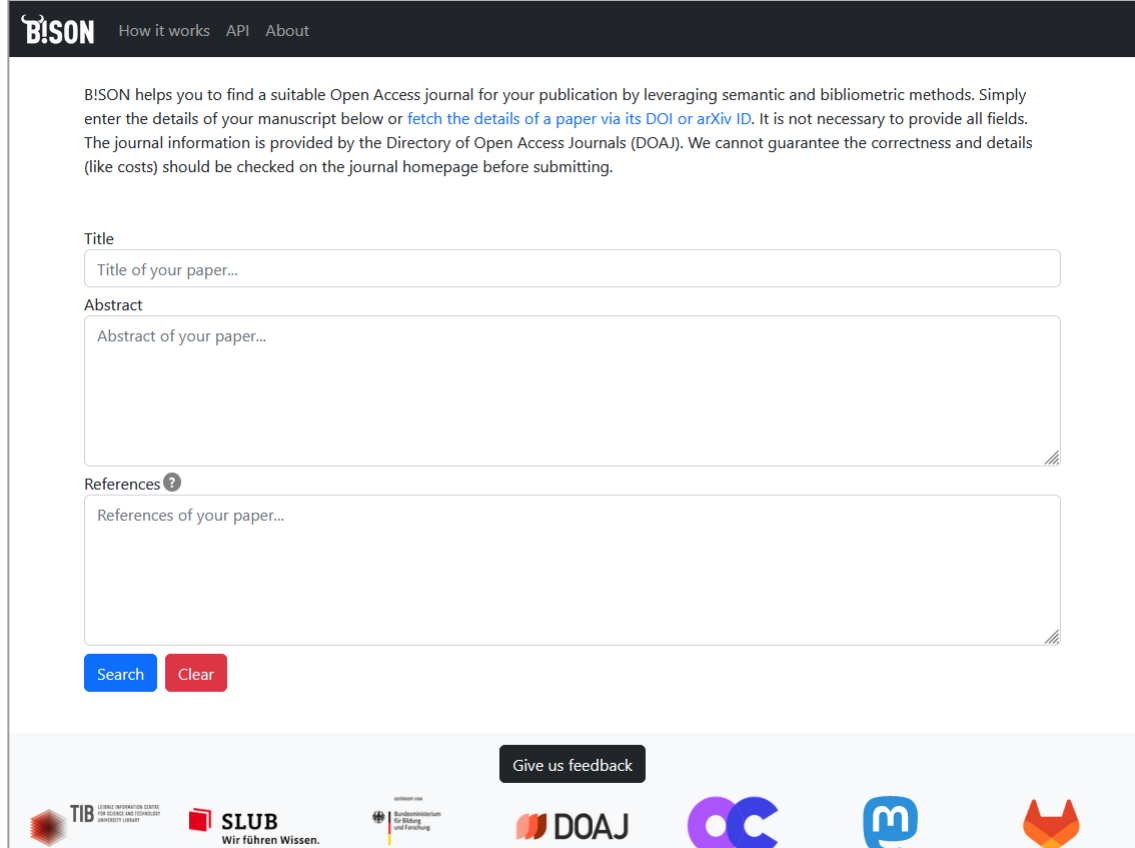


Summary:

- Recommendation service for quality-assured open access journals
- Recommender System filters a list sorted by relevance from the large number of available Open Access journals
- In addition to standard bibliometric methods for determining similarity, machine learning methods are used to determine the semantic similarity between user entries (title / abstracts / references)

Content:

- the project co-operates with [OpenCitations](#) and [DOAJ](#) (Directory of Open Access Journals)



B!SON [How it works](#) [API](#) [About](#)

B!SON helps you to find a suitable Open Access journal for your publication by leveraging semantic and bibliometric methods. Simply enter the details of your manuscript below or [fetch the details of a paper via its DOI or arXiv ID](#). It is not necessary to provide all fields. The journal information is provided by the Directory of Open Access Journals (DOAJ). We cannot guarantee the correctness and details (like costs) should be checked on the journal homepage before submitting.








Title
Title of your paper...

Abstract
Abstract of your paper...

References ⓘ
References of your paper...

[Search](#) [Clear](#)

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THE COLLEGE AND UNIVERSITY
OF WÜRZBURG LIBRARY  SLUB Wir führen Wissen.  Bundesministerium
für Bildung
und Forschung  DOAJ   

Who are we? – A brief overview of the TIB

Selected TIB services

TIB Open Publishing (<https://www.tib-op.org/ojs/>)



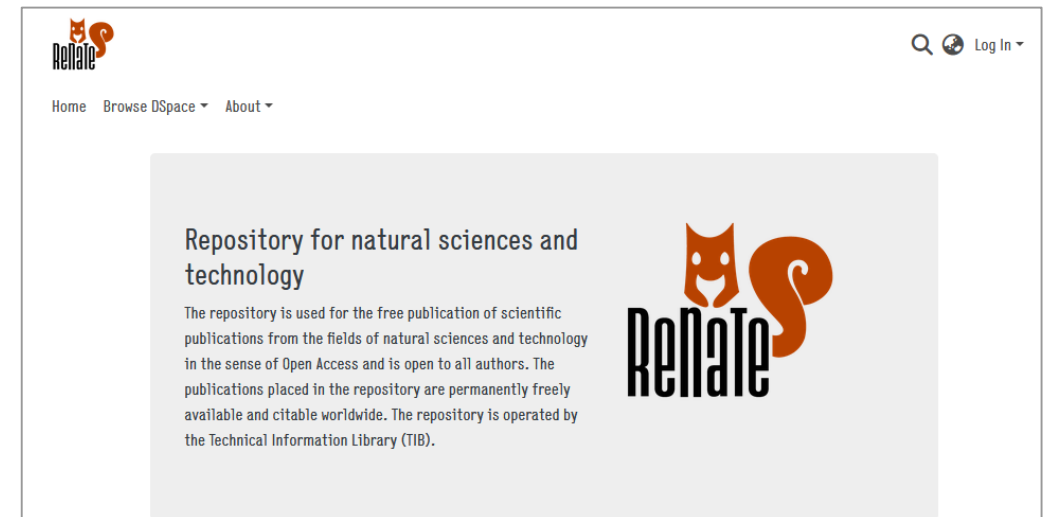
Summary:

- Open Access platform for publishing scientific journals and conference publications
- service is available to all scientific disciplines, although the focus is on Technische Informationsbibliothek (TIB)'s central subjects: natural sciences and technology
- service is aimed at editors of scientific journals and conference publications who want a library-supported, but at the same time sophisticated, sustainable, and fully open access publication option

Renate (<https://oa.tib.eu/renate/home>)

Summary:

- Repository for **natural sciences** and **technology**
- Free Open Access publication of scientific works
- Open to all authors in these fields - regardless of affiliation
- All documents receive a Digital Object Identifier (DOI) as stable addresses and are archived for the long term.



Who are we? – A brief overview of the TIB

Selected TIB services

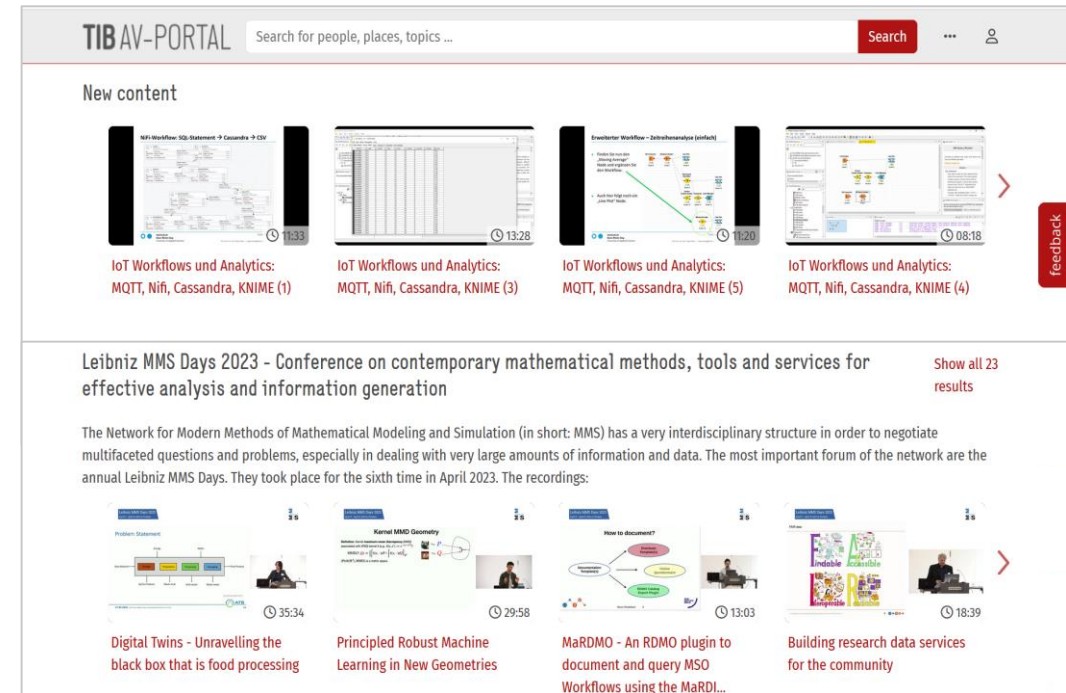
TIB AV-Portal (<https://av.tib.eu/>)

Summary:

- Media-specific portal for **scientific audiovisual media**: **publish and search** for science videos, **quote** scientific films and get **video tips**
- Automatic image and text analysis with scene, speech, text and image recognition
- Transcription of the video content: Video Optical Character Recognition, Automatic Speech Recognition, Visual Concept Detection
- Assignment of persistent identifiers (DOI) and media fragment identifiers (MFID)

Content:

- Research and educational films from science and technology
- 47.043 videos (March 2024); top 3 subjects:
 - 24.739 videos from computer science
 - 7.378 videos from mathematics
 - 4.438 videos from physics
- Mostly under Open Access licence





Publishing science videos

Noncommercial - persistent - visible.
Publish with us legally compliant with many benefits.



Consultation needed?

Individual consulting offer for researching and publishing audiovisual media.



Quote scientific films

You can easily quote scientific films and film segments with Persistent Identifier.

What is a Specialised Information Service?

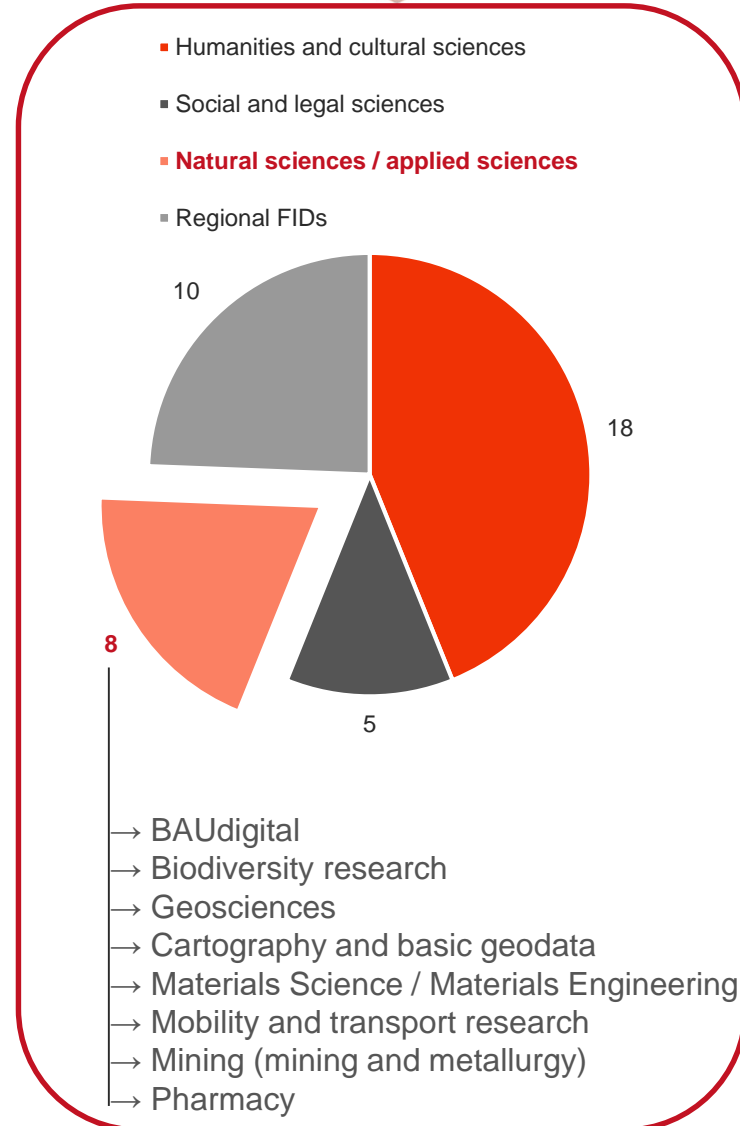
Fachinformationsdienst (FID) = Specialised Information Service

Historical Context:

- Originated from the **Special Subject Collections** (Sondersammelgebiete) in Germany.
 - System of supra-regional literature supply funded by DFG from 1949 to 2014.
 - Libraries collaborated to acquire specialized scientific literature, ensuring availability at least once in Germany.
- Transformation from Special Subject Collections to **Specialized Information Services**.
- DFG funding initiated in 2014, with term limits (currently up to 12 years).

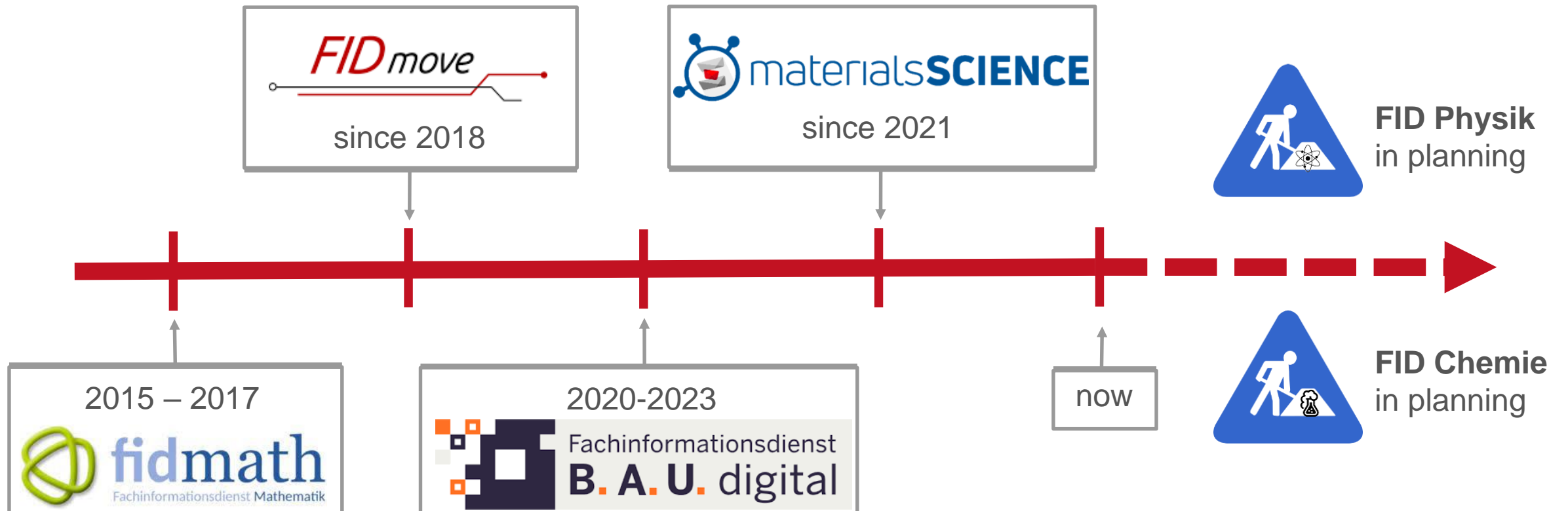
Present State:

- **Aims to support research**, complementing local infrastructures at universities and research institutions.
- Focus on detailed examination of **specialist communities' needs** to develop tailored services.
- **Offers added value** compared to basic tasks of research libraries and information services.
- Each service should be **related to specific subjects or specialist communities**.
- Designed to align with the interests of the research community in each discipline.
- Facilitates **quick access to specialised literature and research-specific information** for German-based researchers.
- Currently, 40 specialized information services are funded by the DFG.



What is a Specialised Information Service?

Specialised Information Services with the participation of the TIB



What is a Specialised Information Service?

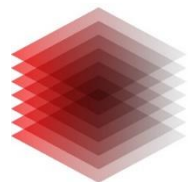
Our plan for the Specialised Information Service for physics

- Proposal due 2024-09-15
- Aiming at services for researchers in all of physics
- Pilot community: physics of (cold) plasmas
- Second tier: (quantum) optics, photonics, atomic & molecular physics
- Metrology as common ground



Preliminary programme

- Search and service portal
- AI for information retrieval
- Promoting audiovisual scientific publications
- Constant communication with our research communities
- Tailored services for plasma physics use cases



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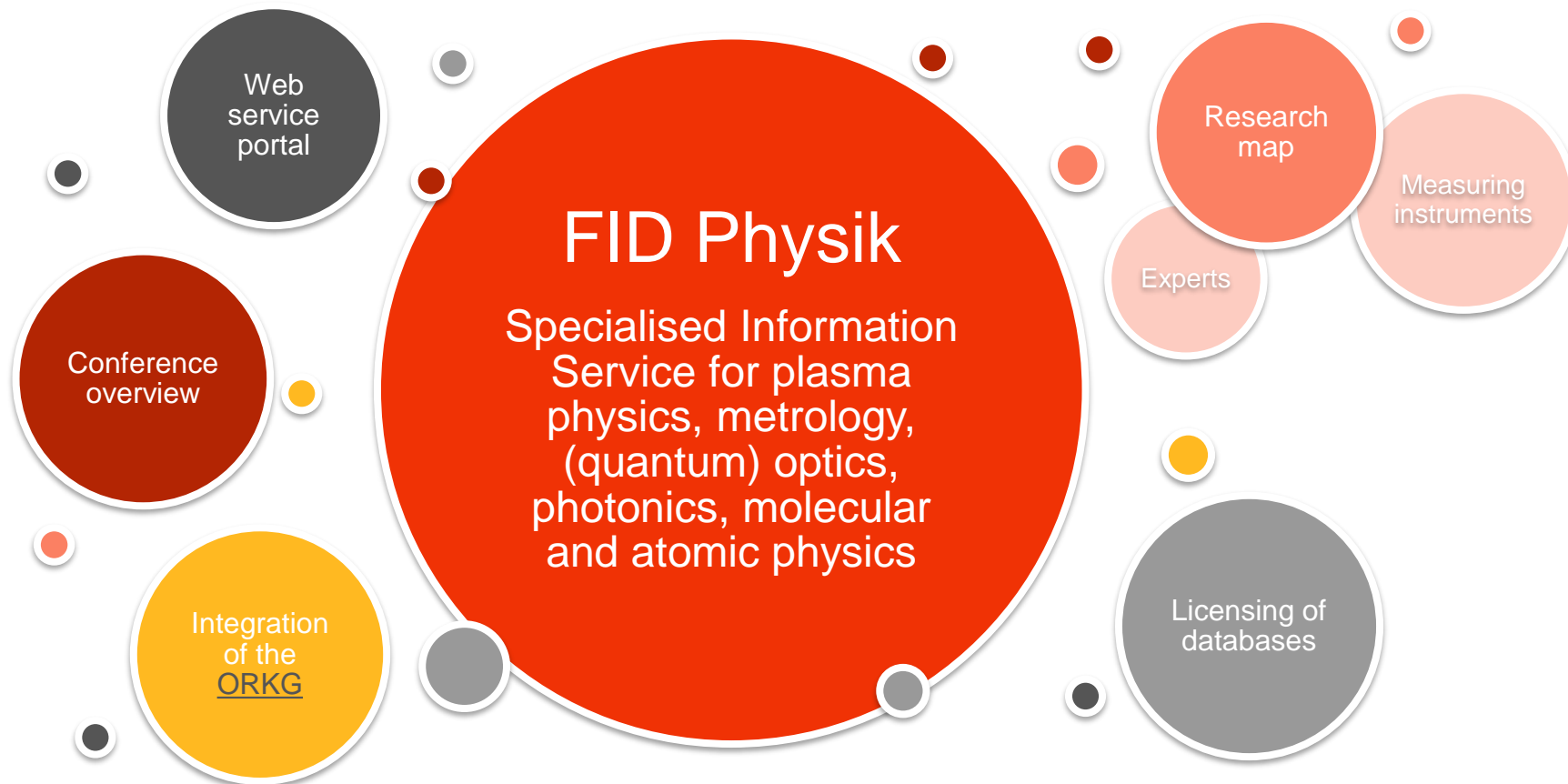
INP 
FROM IDEA TO PROTOTYPE



Physikalisch-Technische Bundesanstalt
National Metrology Institute

What is a Specialised Information Service?

Our plan for the Specialised Information Service for physics

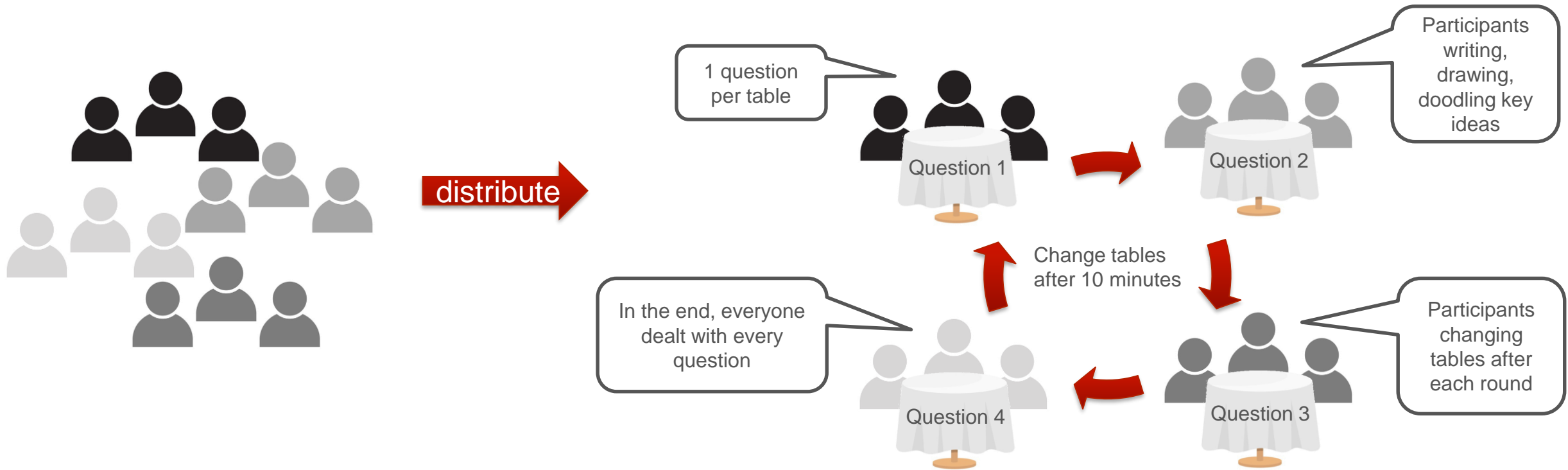


Now is your turn!

World café

Short introduction

World café = structured conversational process for knowledge sharing



At the end, all questions are briefly discussed and there is a summary.

World café

Ready for some action?

1. Distribute yourself evenly across the tables with the questions
2. Read the relevant question and exchange ideas with the people sitting next to you
3. Write down your ideas, suggestions and thoughts on the topic
4. Change the table and the topic when we give you a signal and start the process again



Question 1

Search for Information: Which problems have you experienced so far in finding relevant specialised information?
What solutions can you imagine to overcome these difficulties?
How do you keep yourself up to date?

Information overload: Which of the currently available platforms do you use to find relevant subject information? What do you think about their efficiency, and how much time does it take you to do a comprehensive search?
How do you evaluate whether - and to what extent - publications, research data and software, as well as other information are relevant to your research?



Question 2



Question 3

Knowledge organization: How do you keep track of information from your field of research? How do you identify trends?
What services do you think would enrich the publication landscape?

Support for getting started: Imagine you are just starting your PhD:
➤ What kind of "support" would you want during your first steps into physics research?
➤ What would you have liked to know at your starting time that you know or use now?



Question 4



Question 5

Expert networking/exchange: What communication channels/ platforms and networking opportunities do you think would be important for your professional community?
What is absolutely necessary to achieve a communication channel/platform for you research community?

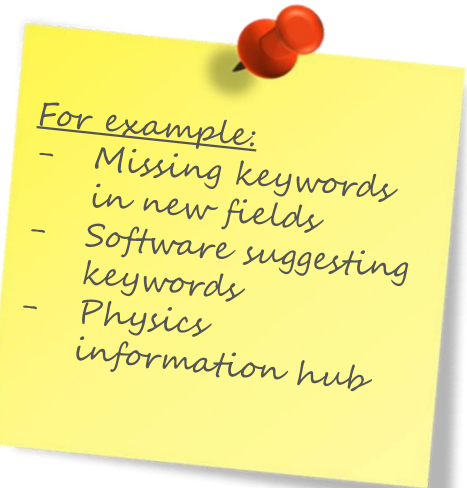
World café

Time to wrap up!



Question 1

Search for Information: Which problems have you experienced so far in finding relevant specialised information?
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Question 2




World café



Time to wrap up!

- For example:*
- Physics-specific consulting
 - Overview on important tools/databases
 - Research map for finding experts or measuring instruments


 **Question 3**


Knowledge organization: How do you keep track of information from your field of research? How do you identify trends? What services do you think would enrich the publication landscape?

- For example:*
- Review paper
 - Talk to colleagues
 - Go to conferences
 - Scientific videos

Support for getting started: Imagine you are just starting your PhD:

- What kind of "support" would you want during your first steps into physics research?
- What would you have liked to know at your starting time that you know or use now?

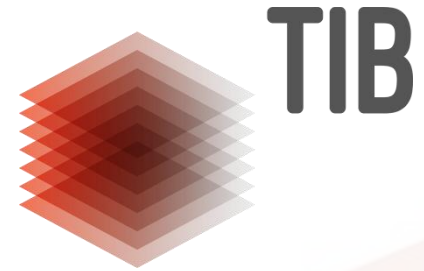
 **Question 4**

 **Question 5**

Expert networking/exchange: What communication channels/ platforms and networking opportunities do you think would be important for your professional community? What is absolutely necessary to achieve a communication channel/platform for you research community?

- For example:*
- Poster sessions for networking
 - Overview of relevant conferences

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MORE INFORMATION

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