



DIG-UM

Thomas Kuhr

25.11.2025

What is DIG-UM?

Digital Transformation in the Research on Universe and Matter

- It is a community organization
- ➔ **Organization of and for you!**
- Goal: Implementation of objectives defined in community white paper



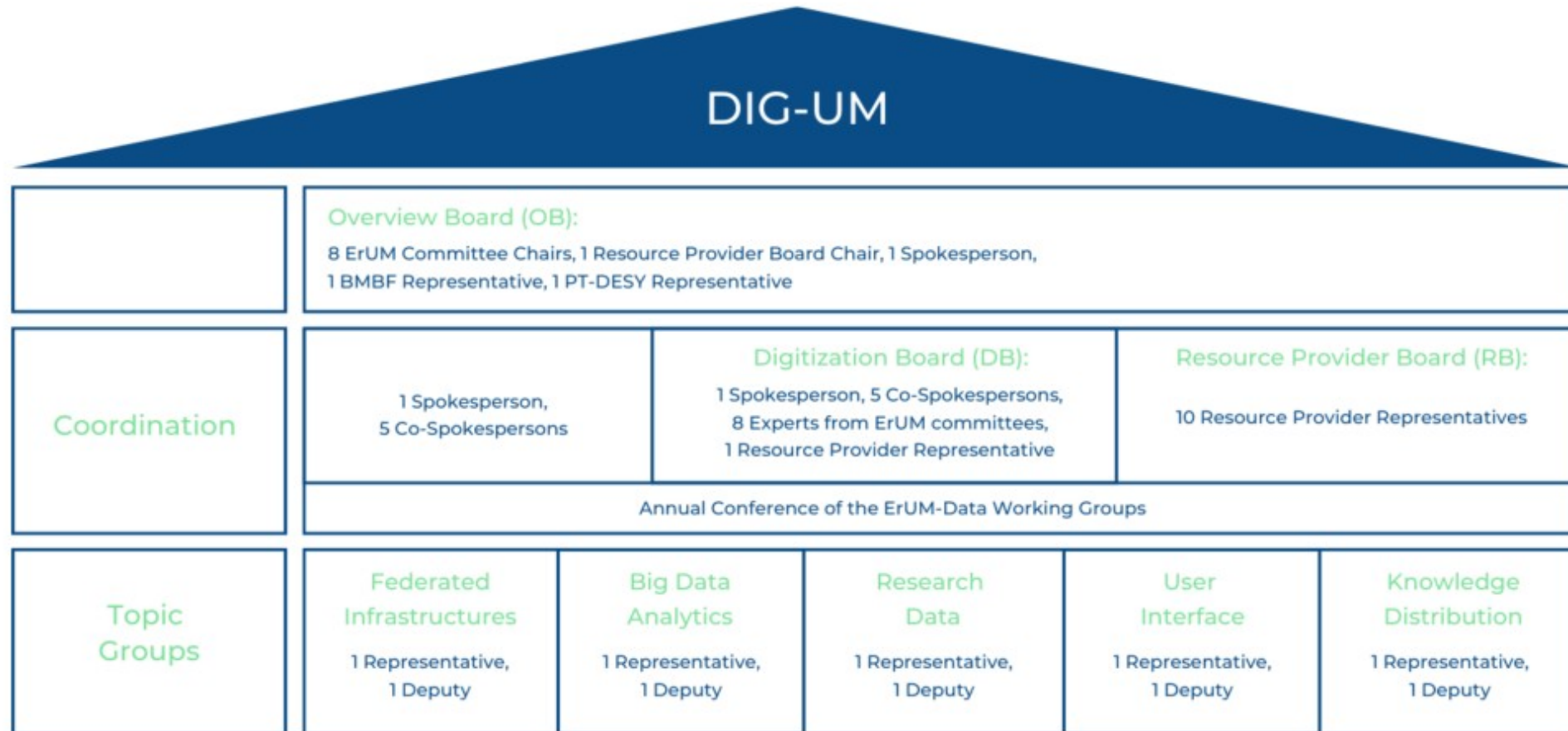
Challenges and Opportunities of Digital Transformation in Fundamental Research on Universe and Matter

Recommendation of the ErUM Committee
[ErUM - Exploration of the Universe and Matter]
20 April 2019

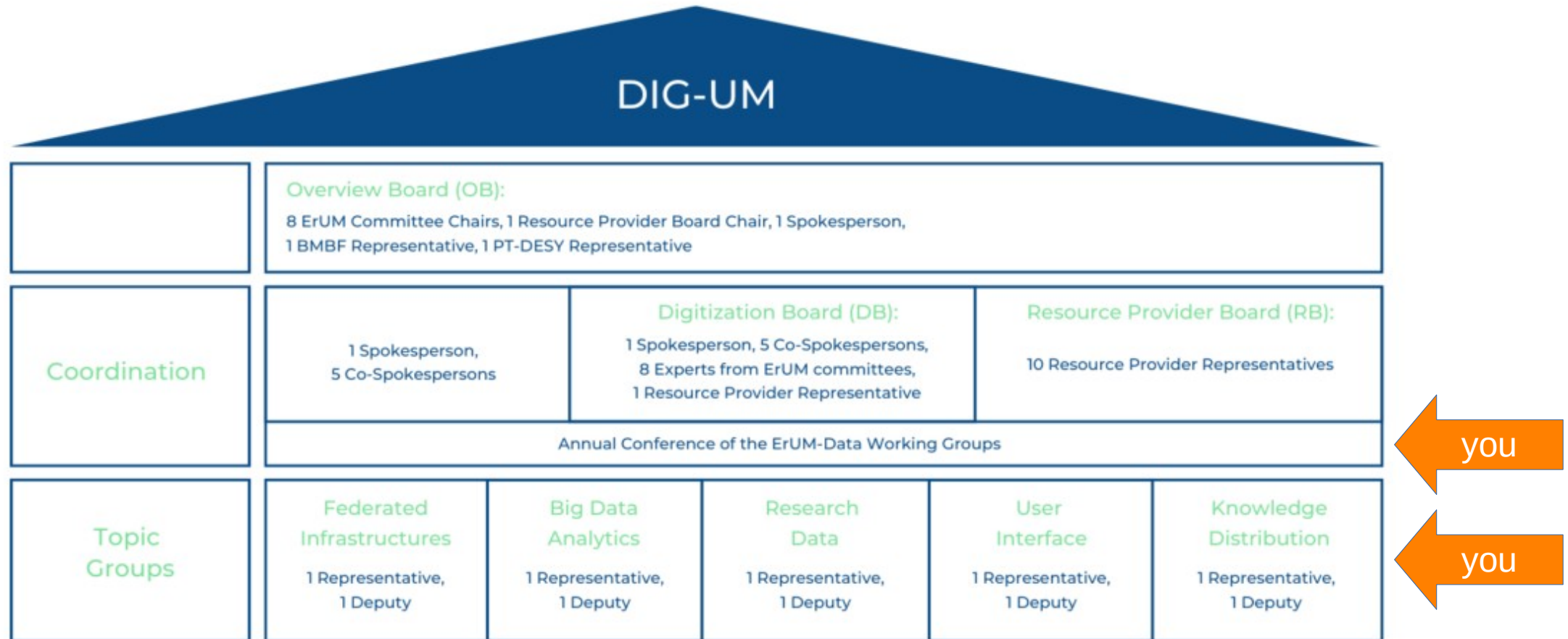
The foundation and driving force behind the joint work is the continuously evolving vision that modern digitization will substantially accelerate progress in ErUM basic research. Digitization is a means to an end.

→ <https://erumdatahub.de/dig-um/>

DIG-UM Organization



DIG-UM Organization



DIG-UM Annual Meeting on December 4th

- Online and in-person in Aachen

→ Open to everybody

➤ <https://indico.desy.de/event/47414/>

1:30 PM	→ 2:30 PM	In Person: Registration, Coffee & Networking
2:30 PM	→ 2:35 PM	Welcome Speaker: Thomas Kuhr (LMU Munich)
2:35 PM	→ 2:55 PM	BMFTR: View on ErUM-Data (tbc)
2:55 PM	→ 3:25 PM	DIG-UM Awards Ceremony
3:25 PM	→ 3:35 PM	ErUM-Data-Hub Report Speaker: Angela Warkentin (ErUM-Data-Hub (RWTH Aachen University))
3:35 PM	→ 3:45 PM	Community Vision for ErUM-Data-Hub 2.0 Speaker: Thomas Kuhr (LMU Munich)
3:45 PM	→ 4:15 PM	DIG-UM Topic Groups Federated Infrastructures Speakers: Dr Kilian Schwarz (IT (IT Scientific Computing)), Matthias Hoeft (Thüringer Landessternwarte) Big Data Analytics Speakers: Christian Stieghorst (TUM / FRM II), Jan Steinheimer (FIAS) Research Data Management Speakers: Gernot Maier (DESY), Hans-Georg Steinrück, Michael Schulz User Interface Speakers: Pierre Schnizer (HZB), Tim Ruhe (TU Dortmund) Knowledge Distribution Speakers: Prof. Dirk Lützenkirchen-Hecht (Bergische Universität Wuppertal), Judith Reindl
4:15 PM	→ 4:25 PM	DIG-UM Resource Provider Board Speaker: Philipp Neumann (IT (Informationstechnik))
4:25 PM	→ 4:35 PM	DIG-UM Overview Board Speaker: Dr Erik Bruendermann (KIT)
5:00 PM	→ 7:00 PM	In Person: Reception & Dinner

DEAR COLLEAGUES OF THE ERUM-DATA COMMUNITY*, WE CORDIALLY INVITE YOU TO PARTICIPATE IN THE

DIG-UM Annual Meeting

- December 4th 2025 -

📍 Erholungsgesellschaft
Aachen & online

AGENDA

- discussing the progress of digital transformation in the ErUM community
- contributions from all DIG-UM topic groups, the DIG-UM boards and the ErUM-Data-Hub



🕒 13:30 - 19:00



🍽️ including
Dinner

Award Announcement

to three outstanding scientists
from the ErUM-Community



REGISTER

indico.desy.de/event/47414/



There is no registration fee.

Gefördert durch:



***ARE YOU PART OF THE ERUM-DATA COMMUNITY?**
There is no official process for becoming part of the **ErUM Data Community**. If you are working in Germany in astroparticle, elementary, accelerator, hadron or nuclear physics, in research with neutrons, synchrotron radiation, nuclear probes and ion beams, at the German Observatory Council or in related fields (computer science, big data, AI, ...) you are automatically part of **ERUM** and invited to the meeting.

DIG-UM Topic Groups

- Federated Infrastructures
- Big Data Analytics
- Research Data Management
- User Interfaces
- Knowledge Distribution

next meeting on 15.1.

→ **Wiki and Mailing Lists:**
<https://wiki.erumdatahub.de/bin/view/DIG-UM/Topic%20Groups/>



Kilian Schwarz (KET)
Matthias Hoeft (RdS)



Jan Steinheimer (KHuK)
Christian Stieghorst (KFN)



Hans-Goerg Steinrück (KFS)
Gernot Maier (KAT)
Michael Schulz (KFN)



Pierre Schnizer (KfB)
Tim Ruhe (KAT)



Judith Reindl (KFSI)
Dirk Lützenkirchen-
Hecht (KFS)

DIG-UM Digitization Board

Committee		Representative	Deputy
Forschung mit Synchrotronstrahlung	KFS	Dirk Lützenkirchen-Hecht	Bridget Murphy
Rat Deutscher Sternwarten	RDS	Marcus Brüggem	Tobias Buck
Hadronen- und Kernphysik	KHuK	Tobias Stockmanns	Sören Lange
Elementarteilchenphysik	KET	Jan Kieseler	Gregor Kasieczka
Forschung mit Neutronen	KFN	Michael Schulz	Andreas Houben
Astroteilchenphysik	KAT	Andreas Haungs	
Beschleunigerphysik	KfB	Erik Bründermann	
Forschung mit nuklearen Sonden & Ionenstrahlen	KFSI	Judith Reindl	
Spokesperson		Thomas Kuhr (Spokesperson)	
Topic Group Federated Infrastructure		Kilian Schwarz*	Matthias Hoeft
Topic Group Big Data Analytics		Jan Steinheimer*	Christian Stieghorst
Topic Group Research Data Management		Hans-Georg Steinrück*	Gernot Maier, Michael Schulz
Topic Group User Interface		Pierre Schnizer*	Tim Ruhe
Topic Group Knowledge Distribution		Judith Reindl*	Dirk Lützenkirchen-Hecht
Representative Resource Provider Board		Philipp Neumann	Arman Khalatyan
ErUM-Data-Hub (Guest)		Martin Erdmann, Angela Warkentin,	Benjamin Fischer
EuCAIF (Guest)		Johan Messchendorp	Tilman Plehn

***Deputy Spokesperson**

→ Minutes of monthly meetings:
<https://wiki.erumdatahub.de/bin/view/DIG-UM/Boards/Digitization%20Board/>

DIG-UM Strategic Activities

- Development of and input to strategies
- Workshops of Topic Groups
- Close collaboration with ErUM-Data Hub
- Contact to national (DAPHNE, PUNCH) and international initiatives (EuCAIF)
- Support letters
- DIG-UM Awards
- Community representation at BMFTR strategy meeting for preparation of next ErUM-Data call

DIG-UM Big Data Analytics Workshop

Mar 13 – 14, 2025
Physik LMU, München Maxvorstadt
Europe/Berlin timezone

Enter your search term

Overview

- Timetable
- Registration
- Participant List
- Payment
- Venue & Travel
- Workshop Dinner
- Data Privacy Policy

Contact

info@erumdatahub.de

This is the annual *Big Data Analytics Topic Group* meeting organized by **DIG-UM** with support from the **ErUM-Data-Hub**. The aim of this meeting is for all members of the BDA Topic Group, and especially participants from the Projects in the Verbundforschung *Software&Algorithmen* of ErUM-Data, to meet up, discuss recent results, new ideas and possible future efforts.

There will be a small fee of 30,00€ which includes the Coffeebreaks as well as the workshop dinner on Thursday March 13.

This workshop is organized by the DIG-UM Topic Group Big Data Analytics.

Starts Mar 13, 2025, 12:00 PM
Ends Mar 14, 2025, 3:00 PM
Europe/Berlin

Physik LMU, München Maxvorstadt
Fakultät der Physik
Schellingstrasse 4, München

Christian Stieghorst
Jan Steinheimer

There are no materials yet.



Summary

- DIG-UM is a community organization
- ➔ **Your active participation is very welcome**
- Subscribe to Topic Group mailing lists
(and use the lists to share information that is of interest to the Topic Groups)
- Participate in Topic Group meetings and workshops
- Shape the Digital Future of ErUM Research