



Bundesministerium
für Forschung, Technologie
und Raumfahrt

ErUM-Data, DIG-UM and ErUM-Data-Hub

KfB FORUM

16.09.2025

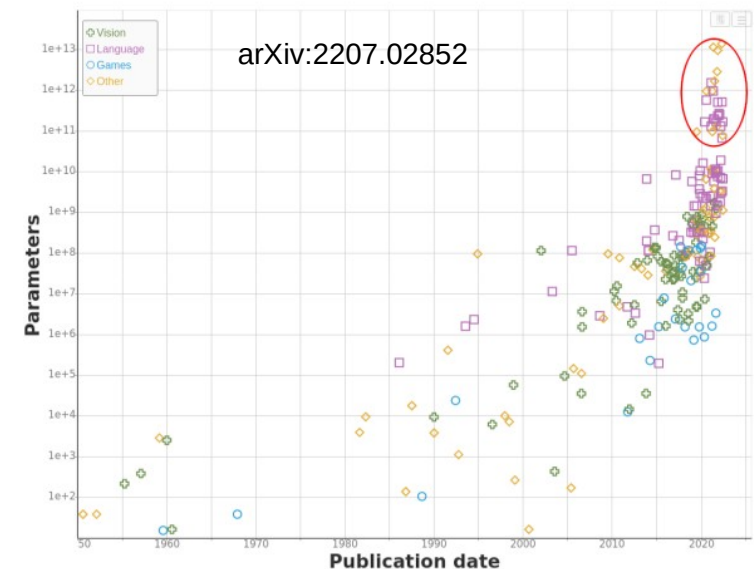
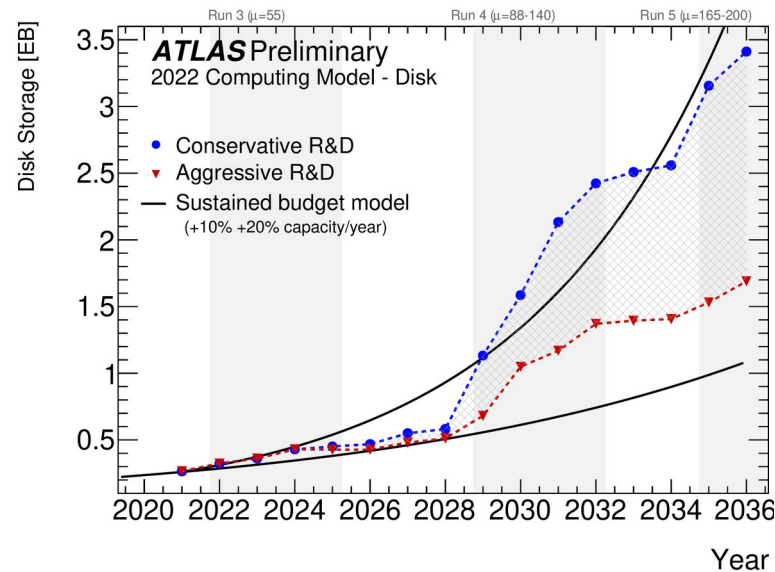
Thomas Kuhr
LMU München



→ Action plans: ErUM-Pro, **ErUM-Data**, ErUM-Transfer

Data in ErUM

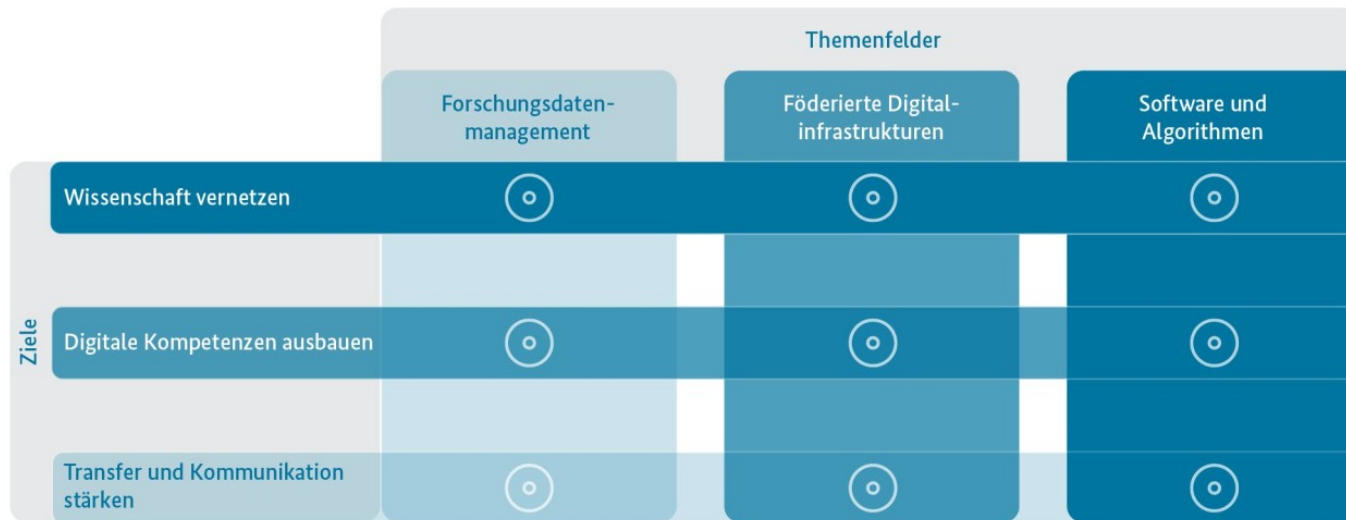
- Challenge: Increasing data rates due to better instruments
- New opportunities offered by new technologies



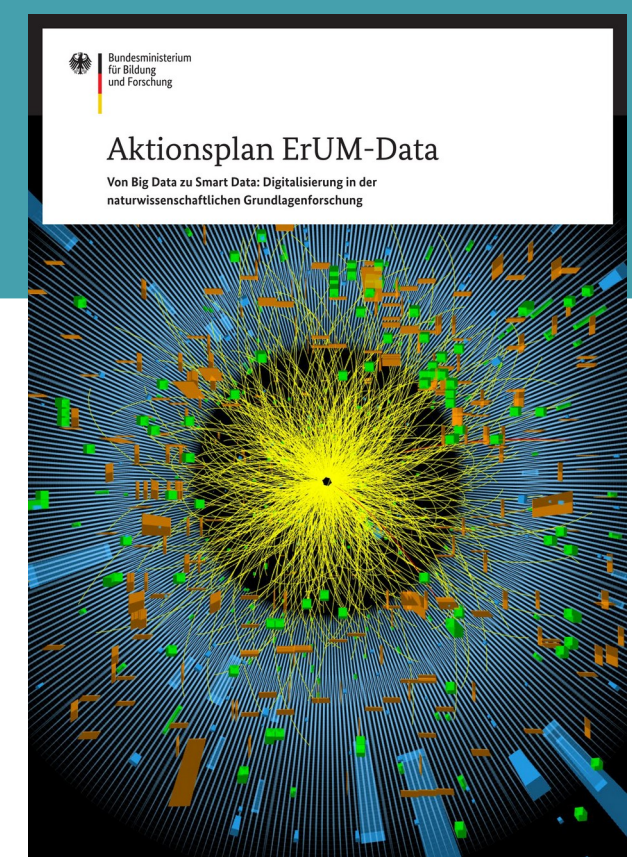
- Similar challenges in ErUM disciplines (and beyond)
→ overarching solutions

ErUM-Data

From Big Data to Smart Data: Digitization in fundamental, scientific research



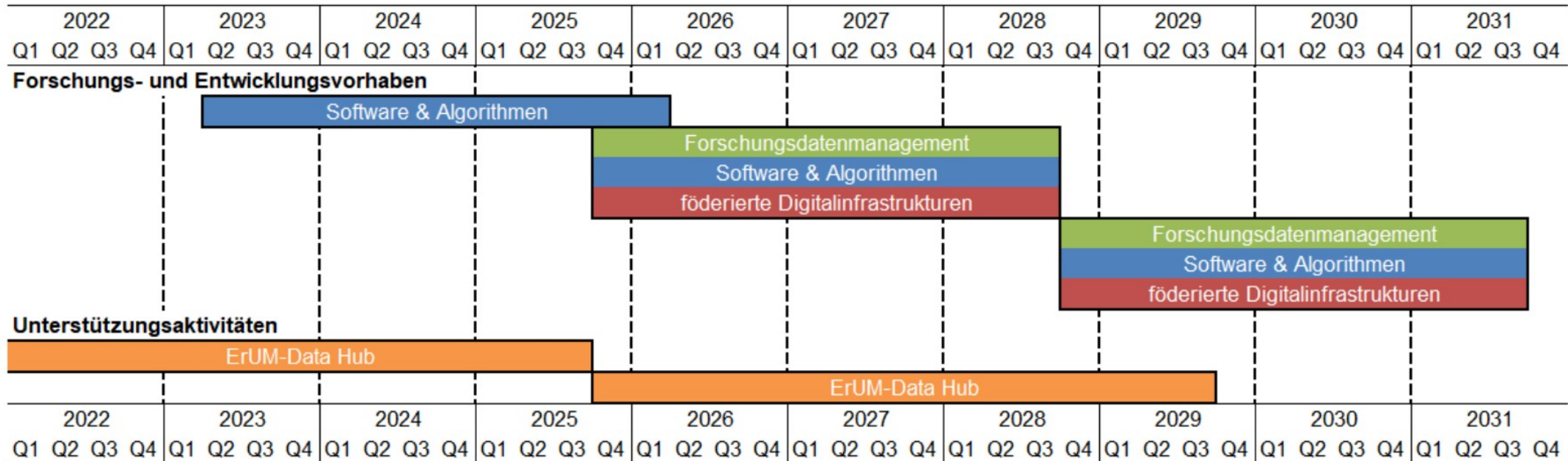
○ Maßnahmen in ErUM-Data



Ausgestaltung und Förderprozess

Das BMBWF sieht für den Aktionsplan ErUM-Data eine Laufzeit von 2020 bis 2030 vor. Die Dauer der einzelnen Maßnahmen richtet sich bedarfsgerecht an den förderrechtlichen Möglichkeiten aus. Unter Vorbehalt verfügbarer Haushaltsmittel sind für die Fördermaßnahmen insgesamt bis zu 120 Millionen Euro vorgesehen.

ErUM-Data Schedule

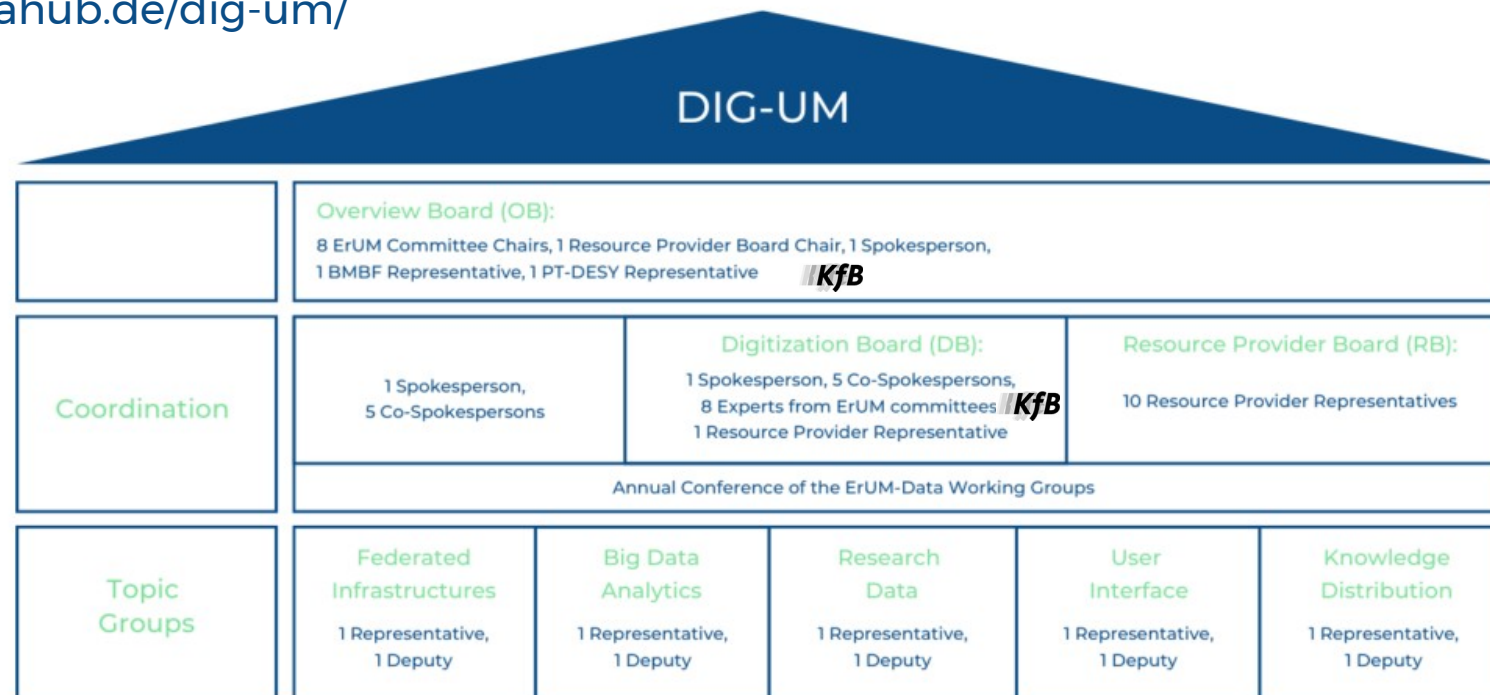


- New projects expected to start in November

Current ErUM-Data Projects

	KAT	KET	KfB	KFN	KFS	KFSI	KHuK	RDS	Inf./M.	Industr.
KI4D4E				X	X				X	X
VIPR		X		X	X					X
KISS	X	X					X	X	X	
ErUM-Wave	X		X						Geoph.	
KI-Morph					X				X	
AI Safety	X	X							X	X
EvalSpek-ML				X	X		X	X		X
OPAL-FEL			X		X					X
4D-KI-track			X		X					
ErUM-IFT	X					X		X		X

- Digital Transformation in the Research on Universe and Matter
- Self organization of the ErUM communities
- <https://erumdatahub.de/dig-um/>



← 4.12.2025 at 14:00

DIG-UM Topic Groups

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

→ **Mailing Lists:**
<https://wiki.erumdatahub.de/de/mailling-lists>



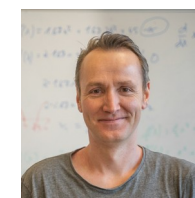
Kilian Schwarz (KET)
Matthias Hoeft (RdS)



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)

ErUM Data Hub

Funded by BMFTR

- Promote networking
- Intensify exchange
- Enhance digital competences
- Strengthen communication

→ <https://erumdatahub.de>

→ <https://wiki.erumdatahub.de>



Events

ERUM-DATA-HUB
EVENT PROGRAMME 2025

6 FEB - **TRANSFER WORKSHOP**
ERUM & INDUSTRY IN DIALOGUE
AACHEN

7 FEB - _____
AACHEN

6 MAY - **DEEP LEARNING "BASIC CONCEPTS"**
SCHOOL
AACHEN

9 MAY - _____
AACHEN

24 JUN - **PYOPP WORKSHOP**
PUBLISH YOUR OWN PYTHON PACKAGE
AACHEN

27 JUN - _____
AACHEN

28 JUL - **SUSTAINABILITY & ETHICS IN ERUM-DATA**
EXPERT WORKSHOP
AACHEN

1 AUG - _____
AACHEN

15 SEP - **DEEP LEARNING**
TRAIN-THE-TRAINER WORKSHOP
POTSDAM

19 SEP - _____
POTSDAM

FURTHER EVENTS:
CONCEPTUAL ADVANCES IN DEEP LEARNING WORKSHOP (HEIDELBERG)

HAVE AN INSIDE LOOK:

Registration & Contact:
erumdatahub.de
info@erumdatahub.de

STAY TUNED

MORE TO BE ANNOUNCED SOON!

SHAPING THE DIGITAL FUTURE OF ERUM-RESEARCH:

SUSTAINABILITY & ETHICS

INSPIRATION • META THINKING • DISCUSSION • ACTION

28.07.-
01.08.25
AACHEN

Confirmed Speaker:

Johannes Hartl, Dr. Martin Möller (Öko Institut e.V.), Wolfgang Gründinger, Prof. Achim Stahl (RWTH Aachen University), Christopher Schrader, Eoin Woods

Review

WHAT HAPPENED SO FAR

- In Person Workshop 2023
- Follow Up Paper
- Online Discussion Evenings 2024

Contact & Information:

www.erumdatahub.de
info@erumdatahub.de
<https://indico.desy.de/event/47133/>

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<https://indico.desy.de/category/984/>



Big Data Analytics	7 Veranstaltungen →
DIG-UM	19 Veranstaltungen →
KFSI	3 Veranstaltungen →
💡 Einige Veranstaltungen in der untenstehenden Liste sind ausgeblendet.	

5 Veranstaltungen liegen in der Zukunft. Ausblenden

- September 2026

📅 01. Sept. - 04. Sept. [Deep Learning School "Advanced Concepts"](#)
- Juni 2026

📅 18. Juni - 19. Juni [2nd Transfer Workshop: ErUM-Scientists & Industry in Dialogue](#)
- April 2026

📅 13. Apr. - 17. Apr. [Deep Learning School "Basic Concepts"](#)
- Dezember 2025

📅 04. Dez. [ErUM-Data Community: DIG-UM Annual Meeting 2025](#)

Impressions from an Event



Conclusion

- You are welcome to participate in shaping the digital future of ErUM research!