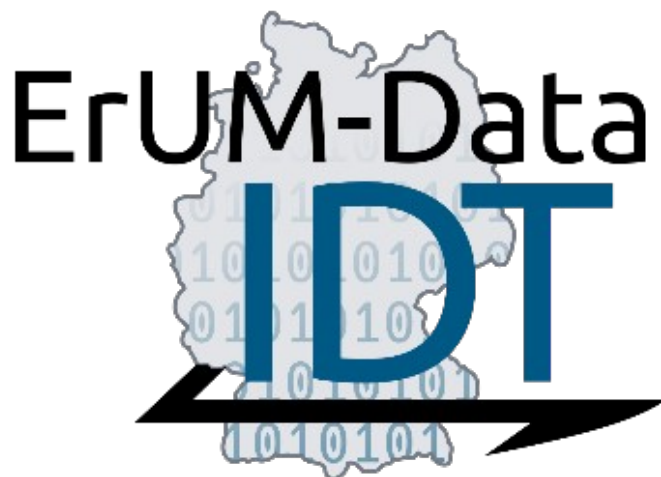


# Collaboration Meeting

of the BMBF Verbundprojekt

Innovative Digitale Technologien  
für die Erforschung  
von Universum und Materie



02.04.2020

Thomas Kuhr  
LMU München



Bundesministerium  
für Bildung  
und Forschung



# Half Time

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- What is our score at half time?
- Are we doing more than exciting projects within one experiment / one group?
- ➔ Yes, e.g. COBaID/TARDIS, Compute Site in a Box, collection of machine learning problems, ACTS
- ➔ Continue in the direction of experiment overarching projects and collaborations among groups and communities
- Focus of talks at this collaboration meeting

# Intermediate Report

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- Report for period 01.10.2018 – 31.12.2019 due end of April
- Instructions on DESY PT web page
- Common part describing the collaboration among partners and contributions of associated partners will be submitted as separate document by coordinator
- Draft attached to agenda
- Discussion later today

# Strategiegespräch

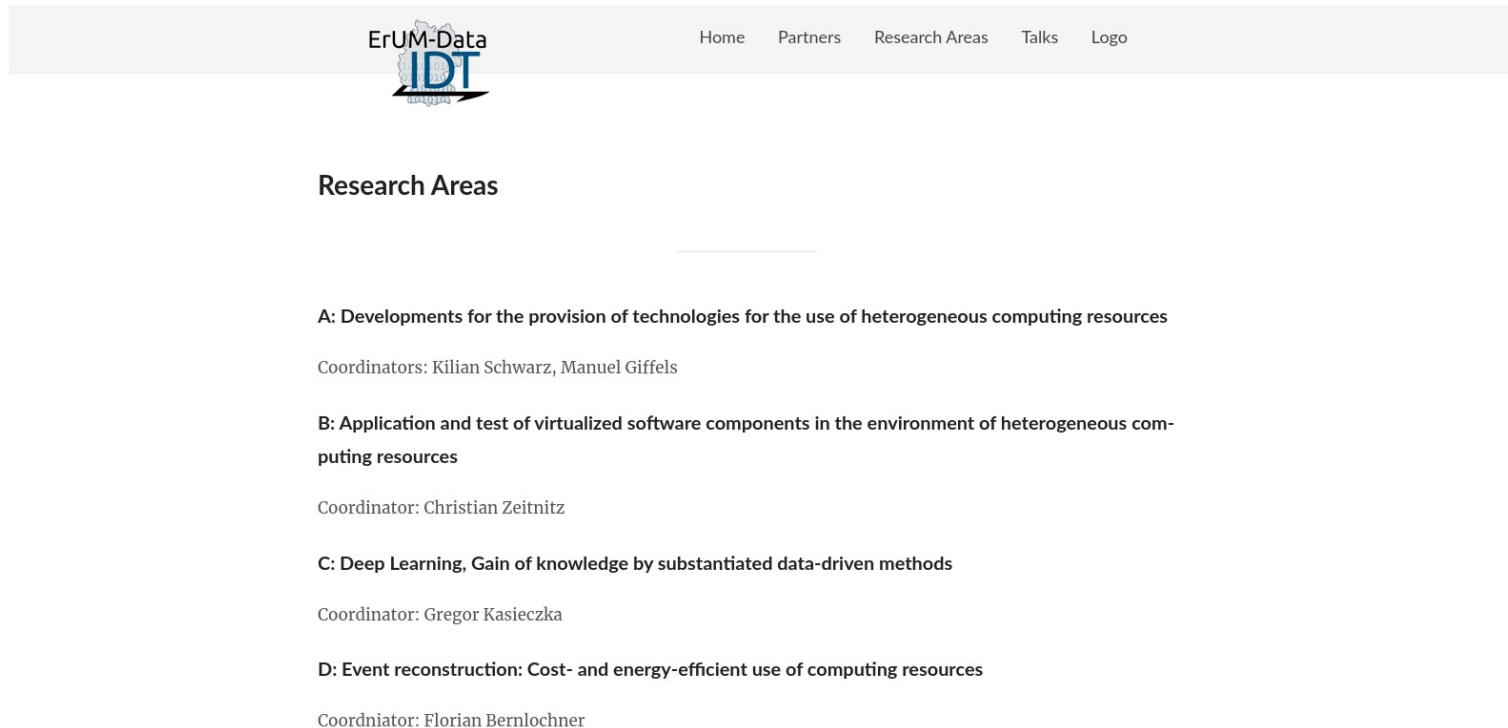
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- Strategy meeting organized by BMBF on May 28/29 to collect input for the preparation of calls for the next funding period
- 15 minutes (including discussion) on computing
- Will ask for input and will circulate slides
  
- ➔ Continuation of our pilot project?
- ➔ ErUM Data action plan?
- ➔ ErUM Data umbrella organization?

# Web Page

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- <https://www.erum-data-idt.de/>



The screenshot shows the website header with the ErUM-Data IDT logo and navigation links: Home, Partners, Research Areas, Talks, and Logo. Below the header, the 'Research Areas' section is displayed, listing four areas (A, B, C, D) with their respective coordinators.

**ErUM-Data IDT** Home Partners Research Areas Talks Logo

## Research Areas

**A: Developments for the provision of technologies for the use of heterogeneous computing resources**  
Coordinators: Kilian Schwarz, Manuel Giffels

**B: Application and test of virtualized software components in the environment of heterogeneous computing resources**  
Coordinator: Christian Zeitnitz

**C: Deep Learning, Gain of knowledge by substantiated data-driven methods**  
Coordinator: Gregor Kasieczka

**D: Event reconstruction: Cost- and energy-efficient use of computing resources**  
Coordinator: Florian Bernlochner

- **Contributions to content welcome:**  
`git clone git@github.com:erum-data-idt/website.git`

# Results



## Talks

- Manuel Giffels: [Effective Dynamic Integration and Utilization of Heterogenous Compute Resources, CHEP 2019](#)
- Max Fischer: [Lightweight dynamic integration of opportunistic resources, CHEP 2019](#)
- Christian Schmitt: [Highly Performant, Deep Neural Networks with sub-microsecond latency on FPGAs for Trigger Applications, CHEP 2019](#)
- Ivan Kisel: [An express data production chain in the STAR experiment, CHEP 2019](#)
- Ivan Kisel: [Missing mass method for reconstruction of short-lived particles, CHEP 2019](#)
- James Kahn: [Selective background Monte Carlo simulation at Belle II, CHEP 2019](#)
- Thomas Kuhr: [Generation of Belle II Pixel Detector Background Data with a GAN, CHEP 2019](#)
- Thomas Kuhr: [Collaborative Research Project - Innovative Digital Technologies for Research on Universe and Matter, HOW 2019](#)

## Posters

- Max Fischer: [Distributed Caching in the WLCG, CHEP 2019](#)
- Marcelo Vogel: [Standalone containers with ATLAS offline software, CHEP 2019](#)

→ Please make sure the results you mention in your report also appear on the web page!

# Meetings

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Meetings are important for collaborations

- Regular remote meetings of subject areas
- Next collaboration meeting September/October, location?

DFNconf for meetings of up to 23 participants:

- <https://conf.dfn.de/webapp/conference/97979427>
- Phone: 0049 30 200 979 – 0, enter 97979427#
- Pexip app: 97979427@conf.dfn.de
- Works on linux
- Ask me for host pin