**Zoommeeting Chairs & Deputies Topic Groups 16.5.2024, 8:30-9:20**

FI, Matthias Hoeft, BDA, Jan Steinheimer, Thomas Kuhr, RDM, Michael Schulz, Hans-Georg Steinrück, UI, Pierre Schnizer, KD Dirk Lützenkirchen-Hecht, ErUM-Data-Hub, Peter Fackeldey, SP, Martin Erdmann

**2nd BMBF PRISMA Trialog 15-May-24, Thomas Kuhr**

The 2nd BMBF Prisma Trialog "Nachhaltigkeit in der Forschung an Großgeräten: Ressourceneffizienz und Zukunftssicherung" was held virtual with more than 40 scientists and BMBF personnel including Volkmar Dietz and Simon Bohleber. The 4-hour meeting included invited talks by metereology experts and reports from the working groups.

- Everyone in this audience is aware of the dramatic challenge we are facing which was underlined by invited presentations by Daniela Jacob (Meteorologist) and Mark Lawrence (Earth atmosphere). Brittany Thesen & Fabian Trinkel gave an impression of reporting according to the European "Corporate Sustainability Reporting Directive (CSRD)".
- Reports of the working groups were given by Valery Lang „Forschungsplanung und Organisation", Thomas Kuhr „Daten und Computing", Erik Bründermann „Technologien an Forschungs-Infrastrukturen", Jan-Dierk Grunwaldt „Forschung für Nachhaltigkeit".

Herr Bohleber views this effort as a grassroot approach and will send written conclusions for our comments.

**Eucaif-Konference 30-Apr – 3-May-24, permanent guest, Martin Erdmann**

European Coalition for AI in Fundamental physics "Eucaif" is the European sister of our national DIG-UM organization (including communities such as KET, KAT, KHUK, RDS, KfB but missing KFN, KFS, KFSI). We will invite Johan Messchendorp from the Eucaif steering committee to our Digitization Board meetings to build a direct communication line between national and international activities.

**Kolmogorow-Arnold-Networks, Peter Fackeldey,**

Peter presented an excellent pedestrian introduction to KANs. The Kolmogorow-Arnold-Theorem enables representing an arbitrary function by summing 1-dimensional well-behaved functions [replacing the universal approximation theorem for perceptrons]. https://arxiv.org/abs/2404.19756 builds multilayer networks using B-splines [instead of neural network nodes with affine mapping followed by activation functions]. Training KANs takes currently factor 10 longer than deep learning networks, however, the precision of KANs is superior and the networks can be interpretated much easier. There is a potential for outstanding applications in ErUM research.

**Next Meetings:**

Next Meeting 30-May-2024, 8:30-9:30 **Digitization Board**
Next Meeting 13-June-2024, 8:30-9:30 **Topic Group Chairs & Deputies**