

# NFDI4Earth Interest Group Research Software (NFDI4Earth RS)

NFDI4Earth Plenum, 2022

**IG** Reseach Software



## Mission & Scope



"Not only research data, but also **software tools are fundamentally connected** to scientific analyses."

"Software Tools and Research Data must be **jointly considered** for findings that are understandable, reviewable, and reusable."

"[...] the IG may reach out and **collaborate with similar groups** in other NFDI consortia."

"The RS IG can help to collect and spot the **Research Software needs of the community** and respond with assistance, guidance, and competence, and exchanges[...]."

#### **Key Outcomes**



- To build a community and pool of experts which are willing and able to share their knowledge and to foster a joint evolution of Research Software 4 Earth System Science
- To provide Open Educational Resources (OER) on selected aspects of the software life cycle including case studies and best practices found in the current NFDI4Earth partner network and beyond
- To provide guidelines for decision-making through all design stages (e.g., cloud vs. on-premise, streaming vs. batch, supercomputing vs. COTS cluster)

#### **Initial Work: Find and Classify Existing Guidelines**



	GUIDELINE	FAIR	Licence	Version.	Citation
DLR	DLR Software Engineering Guidelines <sup>1</sup>		✓	✓	✓
Helmholtz	Muster-Richtlinie Nachhaltige Forschungssoftware an den Helmholtz-Zentren <sup>2</sup>	✓	✓	✓	<b>√</b>
Allianz-Initiative Digitale Info.	Handreichung zum Umgang mit Forschungssoftware <sup>3</sup>	✓	✓	✓	<b>√</b>
PIK	Software and Model Guidelines <sup>4</sup>			✓	<b>√</b>
eScience Center	Netherlands eScience Center - Software Development Guide <sup>5</sup>		✓	<b>√</b>	<b>√</b>
RDA: FAIR4RS WG	FAIR Principles for Research Software (FAIR4RS Principles) <sup>6</sup>	✓			

<sup>1</sup> https://zenodo.org/record/1344612

<sup>2</sup> https://doi.org/10.2312/os.helmholtz.007

<sup>3</sup> https://doi.org/10.5281/zenodo.1172969

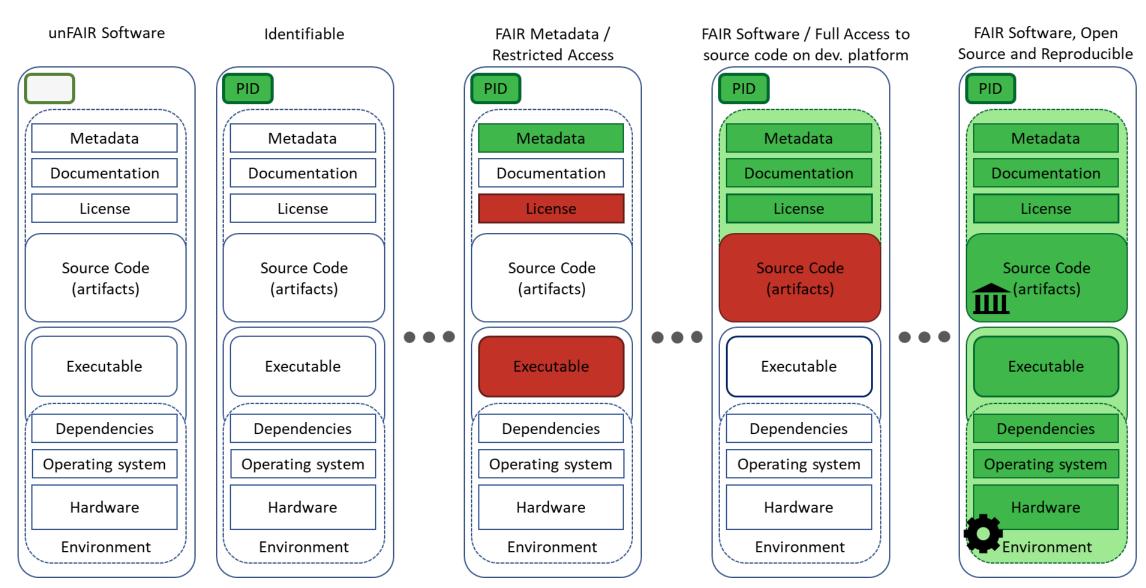
<sup>4</sup> https://www.pik-potsdam.de/en/output/software-data-models/software-and-data-guidelines

<sup>5</sup> https://guide.esciencecenter.nl

 $<sup>\</sup>label{lem:comp} \begin{tabular}{ll} 6 & $\underline{$https://www.rd-alliance.org/group/fair-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair4rs-wg/outcomes/fair-principles-research-software-fair-principles-$ 

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#### Join us



# (1) Approach or Join the (Open and Flexible) Coordinator Group (alphabetical order)

- Andrea Lammert <u>lammert@dkrz.de</u>
- Bernadette Fritzsch <u>Bernadette.Fritzsch@awi.de</u>
- Daniel Nüst <u>daniel.nuest@uni-muenster.de</u>
- Dominik Hezel <u>dominik.hezel@em.uni-frankfurt.de</u>
- Martin Werner martin.werner@tum.de

#### (2) Join our E-Mail List and/or Pad to get involved

<u>nfdi4earth-ig-researchsoftware@groups.tu-dresden.de</u> <u>https://pad.gwdg.de/zgBtZ-SYSxSKezjxhtqs8g</u>

(3) Step by our poster to chat around the topics of Research Software

# Thank You!



https://www.nfdi4earth.de/