

Red line sustainability as ecological (- social) (- economic), specify (...) for this paper

1) Sustainability actions: effectiveness of recommended measures, strategies for future

- A) a. Concrete measures towards sustainability-improved computing, Life Cycle
- b. Concrete measures towards sustainability-improved software/algorithms
- c. Simulations of computing resources & workflows (collaboration issue) and their sustainable usage
- d. Theoretical calculations for balances knowledge gain with resources
- B) New ideas, sustainable future, perspectives derived from recommended measures, ErUM-Data funding, Prisma Trialog with BMFTR (possibly split into subsections)

2) Ethics: Transformative potential of AI (connectionists methods or ML)

- A) a. Chances and risks for transformative impact on scientists/mankind, high potential for accelerating ErUM sciences, discuss separately categories generative text and physics models
- b. Criteria for evaluating which measures improve science/scientists situation and which harm (biases etc.)
- c. Transparency and explainability of AI measures
- d. Attribution of responsibility for AI
- e. Ethics in providing and using software
- B) Future perspective

3) Assisting awareness: how do we do science sustainably & ethically

- A) a. Adapting granularity in explaining scientific progress and its relation to sustainability & ethics
- b. Developing and providing paved roads for teaching and outreach (easy to do right thing), building a campaign
- c. Analysis of communication threads and helpful measures to counteract
- d. Formulating common vision(s) as a positive strong drive towards a resilient better future
- B) Future perspectives (concrete actions, separately needed?)

Perspectives next workshop increasing hand print (definition quantitative)