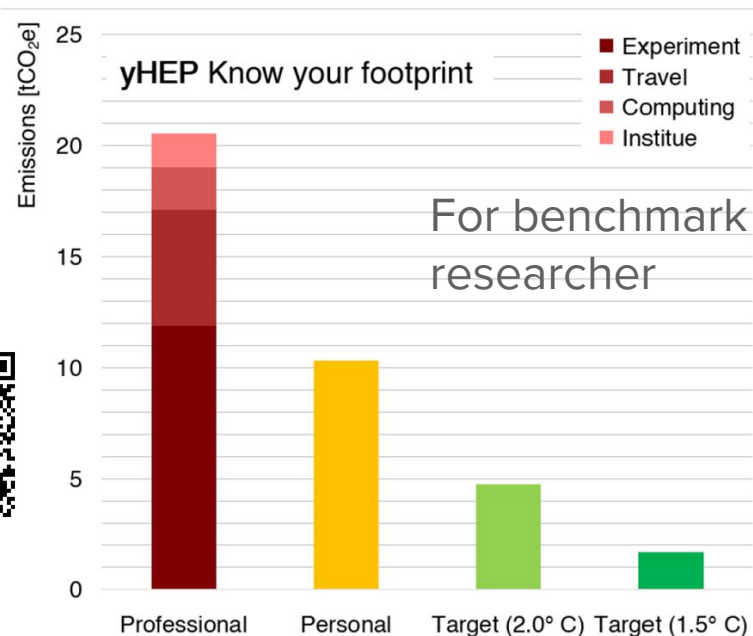# Know your footprint
- and how to go on -

Valerie Lang
Discussion Evening: Sustainability in ErUM-Data
18.11.2024

Know your footprint - What is it?

Aim: Understand the professional footprint of researchers in High Energy Physics and related areas ➜ Estimate per researcher per year

- Split into: Experiment, Institute, Computing and Travel
  - Compare to the private footprint
- Publication on [arXiv](), and released Know-your-footprint (Kyf) calculator for personalized emissions
  - Including option to submit the data to us for further analysis and statistics
- Publication submitted to [npj Climate Action]()
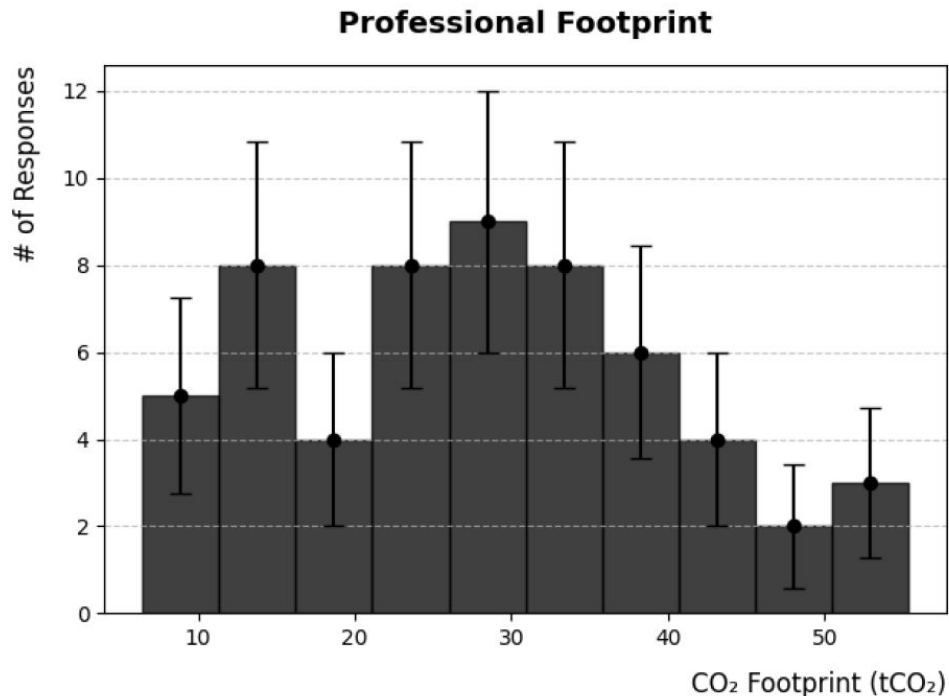

For benchmark researcher

Know your footprint - Where do we stand?

Raising awareness for the need for action in our field

- Presentations at various occasions
  - Seminar talks at KCETA colloquium Karlsruhe and at PSI, Switzerland
  - Presentation at ICHEP2024, Workshop at SustHEP2024
  - Presentation at ErUM-Data Python school Aachen 2024

First look into the collected data

- Benchmark researcher below average ➜ lots of work ahead!

Professional Footprint

Improve your footprint - Where do we go?

Advancing the granularity and applicability of Know-you-footprint

- Make the Kyf calculator global & independent
  - Include more countries, experiments, institutes, etc. ➜ Build own more flexible platform
- Provide feedback on how to Improve your footprint (Iyf)
  - Use case for Artificial Intelligence (AI) ➜ BUT needs to be sustainable, trustworthy, and consider human needs ➜ All three criteria still major issues for AI
- But: Further developments will need funding: Propose ErUM-Data project
  - Kyf initiative fully driven by early-career researchers (ECRs) ➜ Possible now for ECRs to obtain funding in ErUM-Data call

➜ If interested in a collaboration, please let us know