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## Fair Universe Challenge Paris 2023

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The Fair Universe project is building a large-compute-scale AI ecosystem for sharing datasets, training large models and hosting challenges and benchmarks. Furthermore, the project is exploiting this ecosystem for an AI challenge series focused on minimizing the effects of systematic uncertainties in High-Energy Physics (HEP), and on predicting accurate confidence intervals. This talk will describe the challenge platform we have developed that builds on the open-source benchmark ecosystem Codabench to interface it to the NERSC HPC center and its Perlmutter system with over 7000 A100 GPUs. This presentation will also mark the launch of the first of our Fair Universe public challenges hosted on this platform, the Fair Universe: HiggsML Uncertainty Challenge. There will be a hackathon during the workshop to develop the current prototype challenge, the full version of which will run in 2024. The Codabench/NERSC platform allows for hosting challenges also from other communities, and we also intend to make our benchmark designs available as templates so similar efforts can be easily launched in other domains.

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