

Scaling MadMiner using **reana**

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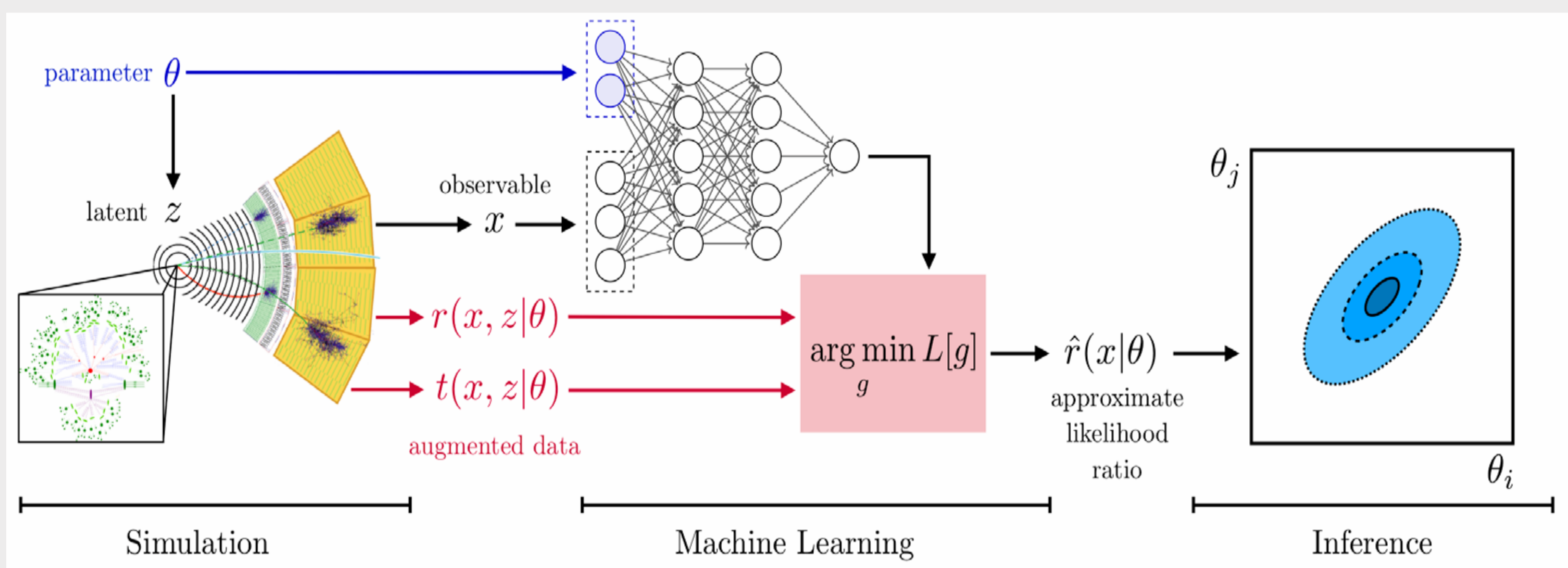
madminer/madminer-workflow

So, you want to use **ML** during **inference** for your **HEP** analysis

*minimize effort,
 we took care of the code!*

What's MadMiner ?? [Brehmner et al. 2020]

MadMiner is a python module that implements a powerful family of multivariate inference techniques that leverage both matrix element information and machine learning.



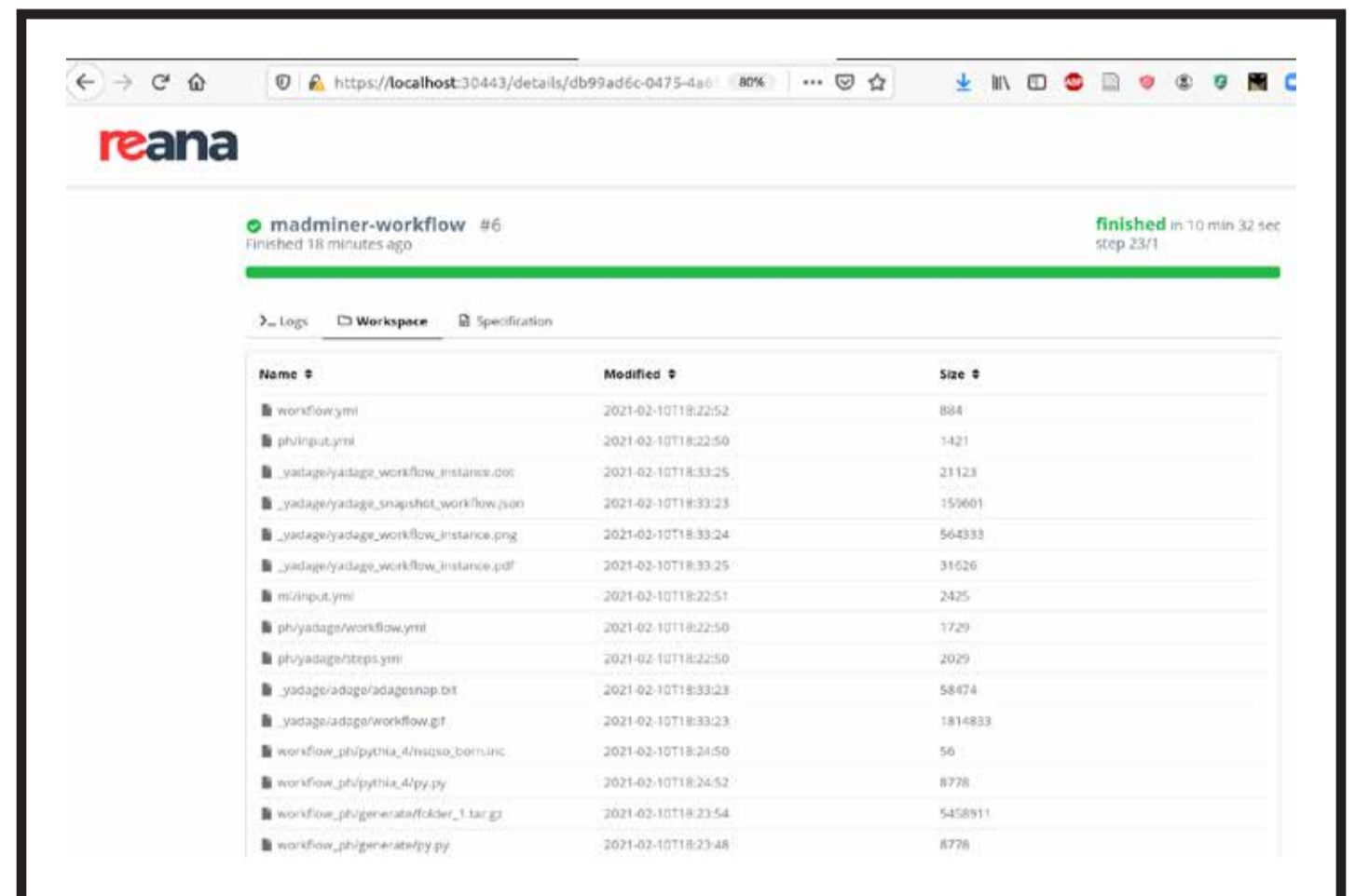
This multivariate approach neither requires the reduction of high-dimensional data to summary statistics nor any simplifications to the underlying physics or detector response.

Do you want to try MadMiner on your research?

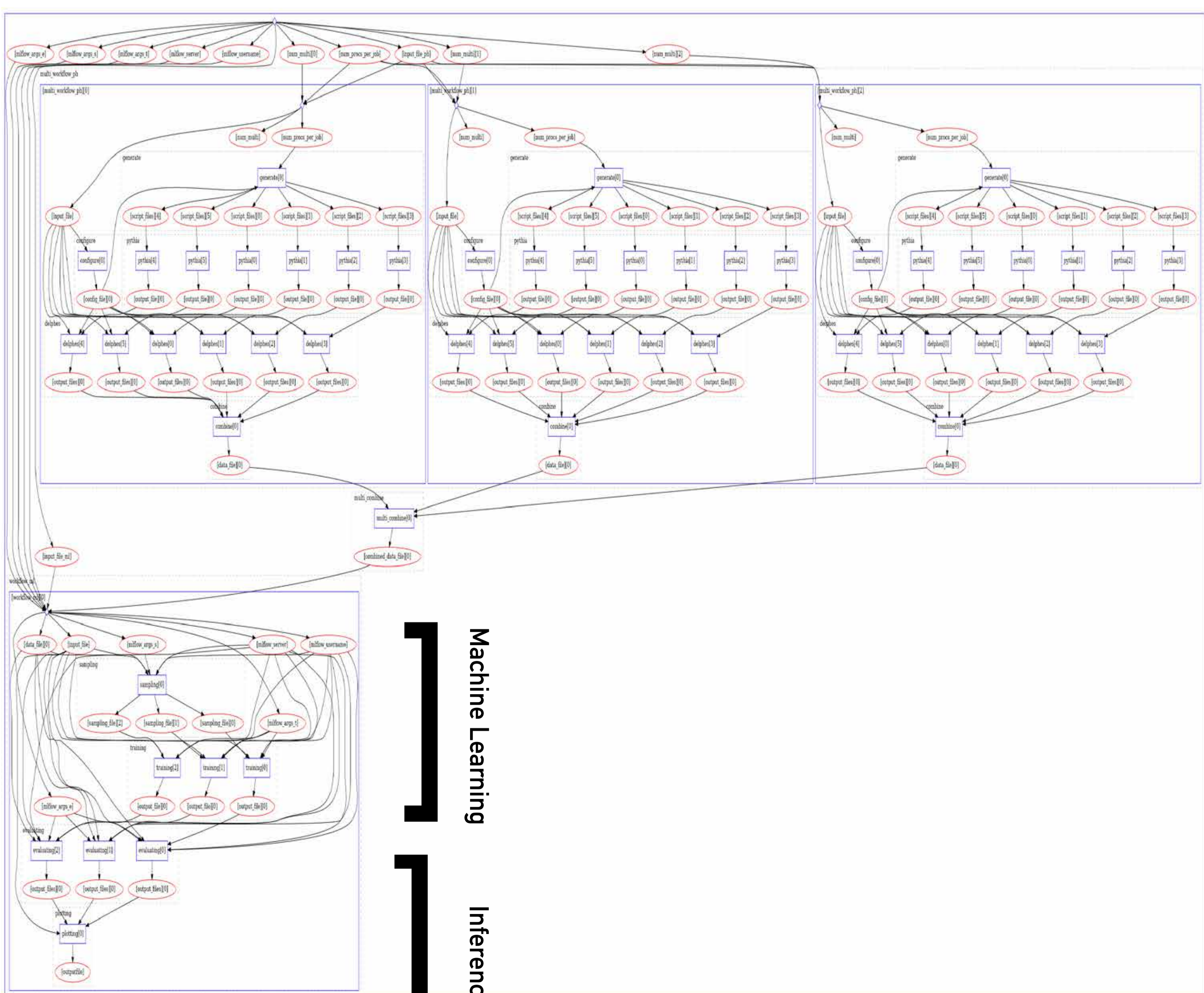
We dealt with all the hassle so you can use it out-of-the-box with your custom inputs

Here's what you need to do

- 1) Install REANA client `$pip install reana-client`
- 2) Git Clone `$git clone madminer/madminer-workflow`
- 3) Change your cards and `input.yml`
- 4) Parametrize events and ML architecture, select models!
- 5) Press run and enjoy the GUI and dashboard of REANA



What you are running under the hood



MadGraph + Pythia+Delphes

Machine Learning

Inference

