

## **Generating airshower images with conditional Generative Adversarial Networks**

Here we show for the first time, the use of conditional Generative Adversarial Networks (cGANs) to synthesize novel IACT images that could be used for training future classification tasks. We will demonstrate that, using airshower data cast as time-series, cGANs can replicate the underlying features of the images, and synthesize additional signals through interpolation in the class and latent spaces. With the help of a dedicated GPU, our method is able to synthesize additional signals at unprecedented speed: one million events in just under a minute.

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**Session Classification:** Contributed posters