

# How to GAN LHC Events

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Event generation for the LHC can be supplemented by generative adversarial networks, which generate physical events and avoid highly inefficient event unweighting. For top pair production we show how such a network describes intermediate on-shell particles, phase space boundaries, and tails of distributions. It can be extended in a straightforward manner to include for instance off-shell contributions, higher orders, or approximate detector effects.

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