



Deep learning and future challenges at HL-LHC

Jennifer Ngadiuba (CERN)

The High-Luminosity LHC (HL-LHC) is expected to begin operations around 2026. With data rates more than 10 times previously achieved, it will bring major challenges to the entire detector system, from the collection and acquisition of data to the final analysis.

Solving such challenges is fundamental to fully exploit the new high-energy frontier and make

physics discoveries at CERN possible.

In this talk, I will review some of these challenges and how recasting problems into Deep Learning problems can help to face them with great advantage for physics.

Mon 04.02.2019 at 17:00
Y15-G-60 Campus Irchel, UZH



Scaling up TensorFlow on Accelerator

Marvin Ritter (Google Brain)

As deep learning is becoming mainstream, several companies have begun the development of custom hardware for machine learning workloads. Recent work has shown that we can train models faster and better using such hardware. TensorFlow makes scaling to this

hardware easy, achieving new state-of-the-art results in Generative Adversarial Networks, with potential applications in the area of high energy physics.

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Further information at
<https://indico.cern.ch/e/ML4HEP>



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