## **Fast Machine Learning**

Tuesday 10 September 2019 - Friday 13 September 2019 Fermi National Accelerator Laboratory

## **Scientific Programme**

The first morning will have site tours of Fermilab.

The first two days of the workshop will consist of invited speakers from across academia and industry. The program is broadly divided into 3 classes of talks:

Overview talks on LHC real-time systems, computing architectures,

resource-constrained machine learning, machine learning at the LHC

Perspectives and status on tools for real-time systems and computing architectures from both academia and industry

Cross-disciplinary discussions on computing and real-time systems from other physics subfields including accelerators and beams, neutrino physics, cosmology, gravitational waves

We will also have a discussion period dedicated to the IRIS-HEP blueprint plan and deliverables.

For the second two days of the workshop, we are planning to include some demos on such tools as hls4ml, Azure ML, Galapagos, and containers. We will also allow some time (office hours) for developers to work together on applications and code examples with experts.