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## Fast Inference for Machine Learning in ROOT/TMVA

*Thursday 7 November 2019 16:15 (15 minutes)*

ROOT provides, through TMVA, machine learning tools for data analysis at HEP experiments and beyond. However, with the rapidly evolving ecosystem for machine learning, the focus of TMVA is shifting.

In this poster, we present the new developments and strategy of TMVA, which will allow the analyst to integrate seamlessly, and effectively, different workflows in the diversified machine-learning landscape. Focus is put on a fast machine learning inference system, which will enable analysts to deploy their machine learning models rapidly on large scale datasets. We present the technical details of a fast inference system for decision tree algorithms, included in the next ROOT release (6.20). We further present development status and proposal for a fast inference interface and code generator for ONNX-based Deep Learning models.

### Consider for promotion

No

**Authors:** ALBERTSSON, Kim (Lulea University of Technology (SE)); MONETA, Lorenzo (CERN); AN, Sitong (CERN, Carnegie Mellon University (US)); WUNSCH, Stefan (KIT - Karlsruhe Institute of Technology (DE))

**Presenter:** AN, Sitong (CERN, Carnegie Mellon University (US))

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