

ROOT Users Workshop



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ROOT as a Python Module

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ROOT can be used as a Python module thanks to PyROOT, the Python-C++ bindings provided by ROOT. With ROOT v6.22, a new PyROOT was released; it is now designed on top of the cppy library, which provides support for modern C++.

This talk will mainly focus on the customizations or “pythonizations” for ROOT classes that have been recently implemented in the new PyROOT. This includes interoperability with NumPy for RDataFrame, the ability to just-in-time compile Python callables with Numba and use them in RDataFrame operations, and a context manager for TFile.

Furthermore, PyROOT now offers a `@pythonization` decorator that can be used to register pythonizations for C++ user classes, which are lazily executed only if the class is actually used from the user code.

Summary

Primary author: TEJEDOR SAAVEDRA, Enric (CERN)

Presenter: TEJEDOR SAAVEDRA, Enric (CERN)

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