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Uhepp: Sharing plots in a self-contained format

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The uhepp (universal high-energy physics plots) ecosystem defines a
self-contained storage format that couples raw histogram data (like a TH1F) with the description of visual
histogram stacks, styles, and labels. Since the raw histograms are retained and packaged in a single file,
rebinning, recoloring, or merging of processes can be achieved easily at render time in a non-destructive way.
The ecosystem is powered by the reference implementation in Python (uhepp on PyPI) that provides utility
methods to create, save, and load uhepp plots, and can render plots with Matplotlib. This talk demonstrates
how to build, save and load a histogram.

Traditionally, plots are shared in a "plot book" containing many histograms in a graphics format that does not
allow extracting numerical values or modifying the binning or the plot composition. This talk introduces the
online hub uhepp.org. The hub exposes a REST API to facilitate collaboration and sharing of plots via push
and pull operations provided by the reference implementation in Python. The online hub offers an interactive
preview of uploaded plots in the browser, removing the need for "plot books." Besides the publicly hosted
uhepp.org hub instance, the project allows self-hosted deployments of the hub infrastructure.

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