

The HEP Statistics Serialization Standard (HS³)

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The HEP Statistics Serialization Standard is a new format in which to write, store, exchange and archive statistical models. It is based on JSON and easily readable and writable for both machines and humans. It is fully interoperable with ROOT workspaces, the current de-facto standard in the experimental HEP community, and has a concept implementation in Julia / BAT.jl and intends to be interoperable with pyhf, zfit and any other large-scale, general-purpose statistical modeling library used in HEP. It supports binned and unbinned datasets and models, as well as a growing library of distributions and auxiliary functions. It is bidirectionally convertible to ROOT workspaces and pyhf JSON files.

While the standard is already in-use and implementations covering most currently defined features exist, the development of the standard is ongoing, and community feedback of any type is highly welcome.

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