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# A C++11 histogram library for Boost

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In 2016, development of an open source C++ library for multi-dimensional histograms in collaboration with the Boost community started, which leverages modern C++11 features such as variadic templates and template meta-programming (TMP). Variadic templates make code possible that works for arbitrary dimensions. TMP allows one to write histograms which compile to very efficient assembler while being easy to use and customize by users. The features of the library were developed with the needs of the high-energy and astroparticle physics community in mind and include the key features of ROOT histogram classes. We present the design and state of this library. An official review for inclusion in the Boost Library collection is planned for September 2018.

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