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[326] zfit: scalable pythonic fitting

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Statistical modelling is a key element for High-Energy Physics (HEP) analysis. Currently, most of this modelling is performed with the ROOT/RooFit toolkit which is written in C++ and poorly integrated with the scientific Python ecosystem. We present zfit, a new alternative to RooFit, written in pure Python. Built on top of TensorFlow (a modern, high level computing library for massive computations), zfit provides a high level interface for advanced model building and fitting. It is also designed to be extendable in a very simple way, allowing the usage of cutting-edge developments from the scientific Python ecosystem in a transparent way. This presentation introduces the main features of zfit and its extension to data analyses in the context of HEP experiments.

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