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zfit - TensorFlow 2.0: dynamic and compiled HPC

zfit is a model fitting library completely implemented in Python and based on the Deep Learning framework TensorFlow. With the recent release of TensorFlow 2.0, the structure of the TensorFlow library, as well as zfit, fundamentally changed; what was before a head-twisting exotic graph building library became a numpy-like, JIT compilable computational backend. It works with Numpy compatible arrays and offers an alternative to the Numpy + numba combination offering possibly more features such as GPU support and gradients. This new approach together with other developments make zfit a versatile library that fully supports now functions which use Python dynamics as well as being compatible with other, Numpy array using packages.
In this tutorial, we will talk 10' with classical slides introducing TensorFlow 2.0 as a computational, Numpy-like library and the impact of this on zfit. The other 10' mins will be spent in a notebook showing some functions with TensorFlow 2.0 code as a direct alternative to Numpy + numba (and others).

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