Contribution ID: **540** Contribution code: **THU 08**   Type: **Poster**

Bamboo: A high-level HEP analysis library for ROOT::RDataFrame

Thursday 24 October 2024 16:00 (15 minutes)

This poster presents an overview and features of a bamboo framework designed for HEP data analysis. The bamboo framework defines a domain-specific language, embedded in python, that allows to concisely express the analysis logic in a functional style. The implementation based on ROOT's RDataFrame and cling C++ JIT compiler approaches the performance of dedicated native code. Bamboo is currently being used for several CMS Run 2 and Run 3 analyses that rely on the NanoAOD data format for which many reusable components are included.

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Session Classification: Poster session

Track Classification: Track 5 - Simulation and analysis tools