Contribution ID: **6**   Type: **not specified**

RooFit parallelization efforts

Monday 10 September 2018 11:35 (15 minutes)

We present an update on our recent efforts to further parallelize RooFit. We have performed extensive benchmarks and identified at least three bottlenecks that will benefit from parallelization. To tackle these and possible future bottlenecks, we designed a parallelization layer that allows us to parallelize existing classes with minimal effort, but with high performance and retaining as much of the existing class's interface as possible. The high-level parallelization model is a task-stealing approach. The implementation is currently based on the bi-directional memory mapped pipe (BidirMMapPipe), but could in the future be replaced by other modes of communication between processes.

Primary authors: Dr BOS, Patrick (Netherlands eScience Center / Nikhef National institute for subatomic physics (NL)); VERKERKE, Wouter (Nikhef National institute for subatomic physics (NL)); CROFT, Vince (New York University (US)); Dr PELUPESSY, Inti (Netherlands eScience Center); BURGARD, Carsten Daniel (Nikhef National institute for subatomic physics (NL))

Presenter: Dr BOS, Patrick (Netherlands eScience Center / Nikhef National institute for subatomic physics (NL))

Session Classification: Parallelism, Heterogeneity and Distributed Data Processing

Track Classification: Presentations