

IPCC ROOT Princeton/Intel Parallel Computing Center

Progress Report

Vassil Vassilev, PhD

Status 20.02.2018—14.03.2018

Infrastructure:

- Enhanced the benchmarks of ROOT covering the python bindings which are widely used by the experiments. We are looking into optimizing the code there.
- Added an initial version of compiler comparison between clang 3.9, gcc 6.2 and icc 18.
- * Reviewing the first external pull request for ROOT's declarative programming interface TDF

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- I/O and Reflection:
 - * Further improved the memory consumption of ROOT by 10% for startup and running some tutorials.
 - Optimized the hashing of pointer and reference types in clang
 - Improvements in the area of on-demand dictionary generation

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- I/O and Reflection:
 - Provided feedback on the C++ modules proposal <u>P0947R0</u> for the C++ Standards Committee Meeting in JAX;
 - * Fixed value printing of C++ objects with overloaded address-of operator;
 - Progress on the adoption of C++ Modules in ROOT, namely fixing ROOT's autoloading of entities in canonical namespaces

Thank you!