



IPCC ROOT

Princeton/Intel Parallel Computing Center

Progress Report

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Status 30.01.2018—19.02.2018

- ❖ The automatic differentiation tool clad landed in ROOT
- ❖ It attaches itself to the ROOT C++ interpreter cling as a ‘plugin’

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- ❖ Implemented a memory optimization which brings down the memory of ROOT by 20% at startup time.
- ❖ The idea is to deserialize only template specializations from the ROOT PCH only when this is needed. We implemented a concept of odr-hashing the template specialization argument list. More information available [here](#) and [here](#). We need to improve the patch to upstream it in Clang.
- ❖ Currently optimizing some collisions wrt pointer and reference types

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- ❖ We made available to public our continuous performance monitoring system (still requires CERN single sign on as per CERN rules). Link available [here](#).
- ❖ We had a presentation yesterday about the infrastructure at the ROOT team meeting. Slides available [here](#).
- ❖ Currently we added couple of grafana dashboards about general ROOT health. Some more to come.

Thank you!