ROOT AND NEW PROGRAMMING PARADIGMS

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• C++ has changed significantly over the last 20 years and its new features can help write much simpler code.

• ROOT is taking advantage of this via new interfaces resolving outstanding challenges but in backward incompatibility way (a once every twenty years event!) while staying familiar.

• Goals:
  • Interoperability, Simplicity, Task Parallelism, Robustness
  • Design for change: abstraction, separation of public and internal parts
  • Improve speed where possible
  • Be used in experiment code developed for CERN Run 3