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ACTS Status

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Reconstructing charged particles trajectories is a central task in the reconstruction of most particle physics experiments. With increasing intensities and ever increasing track densities this combinatorial problem becomes increasingly challenging. Preserving physics performance in these difficult experimental conditions while at the same keeping the computational cost at a reasonable level, is a challenge for many experiments. A Common Tracking Software (ACTS) is an effort to bring a well-tested tracking software to modern compilers and computing architectures to allow easy computational optimization of existing algorithm as well as simple evaluation of new approaches. Based on the ATLAS tracking software, ACTS aims to provide a clean code base that is optimized for concurrent and vectorized execution. This talk will discuss the basic design decisions, its current status, and the future roadmap.

Presenter: KIEHN, Moritz (Universite de Geneve (CH))

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