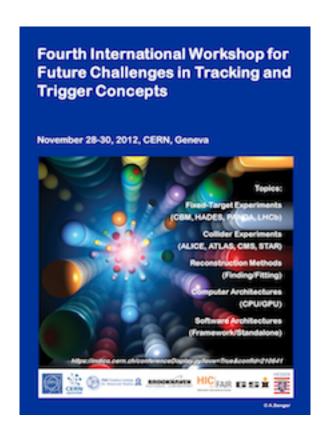# Fourth International Workshop for Future Challenges in Tracking and Trigger Concepts

Wednesday, 28 November 2012 - Friday, 30 November 2012

CERN

Scientific Programme

The Workshop is focused on development of fast and parallel reconstruction algorithms for running and future HEP experiments. The algorithms have to provide reliable reconstruction of data at the significantly increased track multiplicities and densities. Future many-core CPU and GPU architectures require basic redesign of the traditional approaches in data processing. Massive hardware parallelization needs the corresponding optimization of the algorithms used for reconstruction and analysis on the level of cores, threads and vectors. To be hardware efficient, it is usually required to implement the algorithms entirely new.

The Workshop is aimed to be a meeting point for discussions and sharing the experience between different HEP experiments.

The program includes:

(1) general discussions on status of the experiments;

(2) issues with the frameworks;

(3) tracking algorithms;

(4) vertexing, analysis and selection algorithms;

(5) parallel hardware related topics;

(6) future plans.

The timetable is permanently updated.