3rd International Summer School on INtelligent Signal Processing for FrontIEr Research and Industry



Monday 14 September 2015 - Friday 25 September 2015

Hamburg

Scientific Programme

Registration is now OPEN.

The target audience is M.Sc., Ph.D.and young postdoc-level engineers and physicists. Indeed the aim of this school is also to bring together the new generation of young engineers and researchers and opened each community to know each other through training sessions combining the most advanced high technological world with the frontier exploration research world especially in Astrophysics and Particle Physics. Research and Industrial fields have to get more and more used to work in close collaboration. This is essential to remain or to get at the forefront of the advanced and highly educated world.

A preliminary program of the sessions with lectures in the morning can be found under Timetable.

The list of Labs and computer-aided sessions, which will take place each afternoon, will be soon available.

The series of Labs and computed-aided classes will include a series of benchmarking platform Labs for introducing the students to the use and application of new hardware and firmware of novel processors (FPGA.s GPGPU's, INTEL Xeon Phi's, Associative Memories ..) to the various fields covered by the School.

Computer-aided Labs will introduce to the development of real-time algorithms and synergies between fields covered by the school.

Introduction to the use of tools to simulate and design FE and readout chains.

Labs dedicated to understanding the new developments on the signal processing of the next generation calorimeters (ex : TMT based calorimeter trigger for CMS) and tracking devices (strip and pixel based devices).

Introduction to novel system integration techniques especially 3D based. Lab on Introduction to data transmission techniques.