

Opening of the 2<sup>nd</sup> season of the International Summer School Series on INtelligent Signal Processing for FrontIEr Research and Industry

## Keywords:

Astrophysics, Medical Physics, Particle Physics, Technological Challenges for confronting Physics Challenges, Exploiting Synergies, Cross Disciplinary

Will be launched at the Campus of the Huazhong University of Science and Technology, HUST, in Wuhan (China) from May 12 to 26, 2019.

http://petlab.hust.edu.cn/infieri2019.htm

Building on the success of the first season of this series of Schools held in Oxford (2013), in Paris (2014), Hamburg (2015) and Sao Paulo (2017) the opening of the second season of the global programme of annual Summer Schools covering the complete signal processing chain for building 21st century instruments will be launched at HUST Campus in Wuhan, China.

The school will focus on the most advanced technologies in the fields of semiconductors, very deep submicron 3D technologies, nanotechnology, interconnects, data transmission, Big data, artificial intelligence and high performance computing. The novel sophisticated signal processing schemes are driven by the demands of the new physics domains to be explored. The two-tier programme comprises lectures and lab sessions in a variety of cross-disciplinary example applications drawn from the exploration of distant universe, through medical imaging of the human body, to the exploration of the elementary particle world.

Worldwide experts from academia and industry will share their insights on technical developments as well as present scientific overviews, alongside hands-on lab sessions involving demonstrators and subject specific master classes on science and technology.

The series of labs and classes with computer-based exercises serve as support and complementary training to the lectures. They will promote collaborative friendly exchanges between the students, lecturers and tutors. This School will focus on: Brain Imaging, Large Radio-Telescopes, Dark Matter and Cosmic Ray Detectors, Neutrinos and Future HEP Accelerators.

The target audience is M.Sc., Ph.D., postdoc-level engineers and physicists.

For examples of the previous schools programs, visit their website:

http://www.usp.br/ime/infieri2016/ https://indico.desy.de/event/infieri15 http://infieri2014summerschool.in2p3.fr/ http://www.physics.ox.ac.uk/infieri2013/