Physics at Future Colliders

An advanced workshop which is devoted to the most important problems of the particle physics, like the CP violation, origin of mass and the electroweak symmetry breaking or breaking of the supersymmetry.

During the workshop, senior physicists will give introductory lectures and lead discussions among participants on subjects related to the physics program of future colliders: Large Hadron Collider (pp), International Linear Collider (e^+e^-) and Photon Collider ($\gamma\gamma$ or $e^-\gamma$). On-going analyses and new results will be presented, mainly by young reaserches.

The workshop will allows students (Master, Ph D) and post docs specialized in particle physics - both in theory and experiment - to learn and to exchange their experiences about various theoretical and experimental aspects of Higgs sector in SM and MSSM/2HDM or other models.

Future Colliders

Physics at:

- Large Hadron Collider (LHC)
- International Linear Collider (ILC)
- Photon Collider at ILC

- Cosmic Microwave Background
- Gama Ray Bursts
- Neutrino experiments
- ...

Physics

Theoretical and experimental studies on:

- Supersymmetry
- Higgs mechanism
- CP violation
- Dark Matter

- Vertex detectors and b-taggings
- Angular correlations
- Detector alignment, calibration ...
- ...