

# Content

## *High Energy Physics*

**HEP\_01** : ILC heavy flavors

**HEP\_04** : Cosmological tests of fundamental physics

**HEP\_06** : Charged lepton flavour violation – searching for indirect signals of new physics

**HEP\_07** : SiW ECAL

**HEP\_08** : ATLAS SUSY search using machine-learning and sophisticated statistical fit  
(ATLAS SUSY)

## *Flavour Physics*

**FLAV\_03** : Flavour Physics and theoretical challenge for precision

**FLAV\_04** : Physics performances in analysis involving  $K_s^0$  in the Belle II experiment

## *Hadron Physics*

**HAD\_02** : ALICE forward upgrade for high precision high statistics Single- and Di-Muon  
Measurements at the LHC

**HAD\_03** : Observing critical fluctuations in the dynamics of heavy-ion collisions

**HAD\_04** : QGP tomography with photons, jets and heavy flavors

## *Neutrino Physics*

**NU\_05** : Measurements of neutrino-nucleus interaction for neutrino oscillation and upgrade  
of the T2K near detectors

## *Muon Physics*

**MU\_02** : New physics search with Muons

## ***Detector R&D***

- D\_RD\_15** : Innovative design concepts P. Bulk Planar Pixel Sensors for HL-LHC trackers construction
- D\_RD\_16** : Development of advanced Monolithic Pixel Detector
- D\_RD\_17** : Development of a high-speed detector readout system
- D\_RD\_18** : Toward the technology choice for the TPC of the ILD detector
- D\_RD\_19** : LiquidO R&D novel detector concept for neutrino experiments

## ***Accelerator R&D***

- A\_RD\_01** : Development of an optical cavity system for the advanced photon sources based on Compton backscattering
- A\_RD\_07** : Suppression of magnetic flux trapping to achieve high-Q of SRF cavities
- A\_RD\_08** : Fast luminosity monitoring and background measurements at SuperKEKB
- A\_RD\_09** : R&D on innovative treatments and characterization of SRF surface for Future accelerators
- A\_RD\_10** : ATF2 studies and preparation for ILC
- A\_RD\_11** : R&D for fundamental power coupler in SRF Mass-production
- A\_RD\_13** : High intensity positron sources for circular colliders (SuperKEKB, FCC –ee)
- A\_RD\_14** : Vibration monitoring and analysis in SuperKEKB

## ***Computing***

- COMP\_03** : Computing platforms for future experiments

## ***High Energy Physics***

**HEP\_01** : ILC heavy flavors

**HEP\_04** : Cosmological tests of fundamental physics

**HEP\_06** : Charged lepton flavour violation – searching for indirect signals of new physics

**HEP\_07** : SiW ECAL

**HEP\_08** : ATLAS SUSY search using Machine-Learning and sophisticated statistical fit  
(ATLAS SUSY)