

# **Outlook on Wake Field Acceleration: the Next Frontier**

**Thursday, 15 October 2015 - Friday, 16 October 2015**

## **Scientific Programme**

<u>Preliminary Program:</u>

- **Fermi Lecture**, Toshiki Tajima "Plasma Acceleration from Laboratory to Cosmos Scales"

- **Wakefield-Acceleration / Deceleration with Existing Large facilities at 100GeV**

1. PETAL-Megajoule
2. CERN-LHC, AWAKE
3. SLAC-FACET
4. Plasma Deceleration

- **Acceleration with micro and nanostructures**

1. Acceleration in dielectric microstructure
2. Acceleration and laser guided microstructure
3. Crystal nanomaterials acceleration
4. High quality proton acceleration to relativistic energies

- **Bridging High Energy Physics and Space technology**

1. Space debris mitigation by laser
2. ICAN technology dual applications in high energy and space physics

- **Applications Physics of Giant Acceleration**

1. Nuclear Physics by laser
2. Cosmic ray acceleration from accretion disks jets
3. Schwinger physics

#### 4. Laser dark field detection

### - Frontiers in laser technology

1. Apollon

2. 5PW Korea laser

3. 10PW SIOM laser

4. Coherent Amplification Network (CAN) : Taking high energy physics and space physics to a new level

5. Cascaded Compression Conversion (C3)

6. Single cycle and Exawatt laser

7. Nexawatt laser

8. LFEX

## Poster session

## Presentations