

# **Dark Matter: A Light Move**

**Monday 17 June 2013 - Tuesday 18 June 2013**

**DESY Hamburg**

## **Scientific Programme**

The workshop will focus on new ideas for direct detection and astrophysical signatures for sub-eV particle dark matter, distributed on three major topics as follow:

Theory (Particle and astroparticle)

Motivation for WISPy CDM (WISPs in PBDM)|Parameter space with better motivated regions,

Relic density (Realignment, Cosmic Strings, Domain Walls),

Basics of detection (Theory of Haloscopes and new Broadband,oscillating EDMs),

Small scale structure (mini-halos, miniclusters, axion stars),

BEC and implications.

Dark matter

Evidences (short review)

Distribution in the galaxy.

Experimental techniques

Review of past experiments,

Resonant cavities,

Radio-detection,

SQUIDS,

Magnetic elds,

Cryogenic cooling.