Workshop Goals

Low frequency

Seismic Arrays
Tuesday I

Xander Campman (Shell)

Ambient seismic noise and its potential use in seismic exploration and monitoring

Jenne Driggers (LHO)

Seismic array measurements at Hanford for NN R&D

Discussions

- What seismic measurements need to be done in the next 10 years at the existing sites and for third-generation detectors?
- How should we develop effective array designs for NN cancellation?

Low-Frequency Gravity Strainmeters Tuesday II

Masaki Ando (Uni Tokyo)

Current status of Phase-III TOBA

Bram Slagmolen(ANU)

TOPEDO torsion-bar experiment

Fiodor Sorrentino(INFN)

Sensitivity limits of atom interferometric gravity gradiometers and strainmeters

Discussions

- What are the main challenges to achieve $10^{-15}Hz^{-1/2}$ at 0.1Hz?
- What can we do with gradiometers that have $10^{-15}Hz^{-1/2}$ at 0.1Hz?

Seismic Sensors
Thursday I

Maria Bader (Nikhef)

Sensor development and characterization at Nikhef

Boris Boom (Nikhef)

Seismic MEMS sensors

Conor Mow-Lowry (Uni Birmingham)

Low-frequency seismic sensors

Discussions

- Considering all conceivable applications in the foreseeable future, what sensor sensitivities do we need to do all of this?
- How to model thermal noise in «spring-antispring» systems?

Sensors / Newtonian-Noise Models Thursday II

Sophie Pelisson (Uni Bordeaux)

NN modeling and cancellation in atom interferometric gravity strainmeters

Angela di Virgilio (INFN)

Seismic rotational measurements

Donatella Fiorucci (APC)

Atmospheric NN models

Discussions

- What effects need to be described with finite-element numerical simulations of atmospheric NN?
- How do correlations of NN from different types of sources between test masses change as a function of test-mass separation?