Seismometry

Principles of seismometry: a pendulum

Superposition principle

Seismic noise

World-wide networks

Filters and frequency ranges of observations
Seismometry

Intertial pendulum for vertical and horizontal motion. Relative motion of the pendulum will be recorded.

What does it record?
Visualisation of the superposition of harmonic waves, the most fundament concept for describing spectral characteristic of physical phenomena?
What's it called?
Observed seismic noise as a function of frequency (power spectrum). Note the peak at 0.2 Hz and decrease as a distant from coast.
World Wide Standardized Seismic Network
Time Scales in Seismology

- Acceleration
- Displacement
- Gravity
- Strain
- Tilt

- Wave propagation
- Dynamic rupture
- Afterslip, slow rupture
- Tides
- Unsteady strain
- Secular strain

Phenomena of Interest