





Host Institution: LGIT Grenoble

Place of Origin: Italy

Appointment Time: march 2010

Task Groups: T4.2 Extension of passive imaging, coda inversion to multiple scales





The project

Using the cross correlation of seismic noise to analyze the Earth's structure & elastic properties:

Surface waves velocity

Attenuation

Anisotropy

Body wave

understand the anisotropy of the noise wave-field and how this influence the measurement of velocity



LAPNET Array 42 Broadband stations!!! Almost 3 years of continuos data!!!











Thanks!!!









What we can learn from noise!?

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From the simple cross correlation of **seismic noise** we can reconstruct the seismic impulse between two stations, and use it to analyze the Earth's structure & elastic properties:



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Which is our scope!?

Test the technique and improve it to the Earth's structure imaging.

Which is our approach!?

Processing (i.e. beam-forming) of the retrieved noise correlation function to understand how the lack of theoretical condition introduce bias in the measurements.

(i.e. understand the anisotropy of the noise wave-field and how this influence the measurement of velocity)







Why LAPNET array?!



- Good data coverage
- Simple geological structure
- Perfect condition to improve and develop the technique

42 Broadband stations!!! Almost 3 years of continuos data!!!















See you soon for further results!!!



Bibliography:

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