

# **Geophysical Signal Processing**

## **Organized by**

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**This session is dedicated to Geophysical Signal Processing , signal processing considered at large i.e. including multidimensional processing. This session aims to gather researchers and engineers from Geophysical domains and disciplines, industry and academia, all focusing on different aspects of signal processing.**

**The relevance of the proposed Special Session to ISCCSP2006 and the significance of the related contributions (max 1000 words).**

A study of the history of signal processing shows that numerous concepts have been developed in a parallel and independent manner in different fields such as geophysics, physics and mathematics. Some of the tools of digital signal processing such as digital filtering, spectrum estimation, prediction theory or inversion data problem have found extensive applications in seismic data analysis.

Today, the most advanced algorithms for processing echo-acoustic data can be found in the field of geophysical exploration. The digital signal processing approach enables us to bring out the underlying model of the source, i.e., the geological structure.

The purpose of the special session is to gather and reinforce collaboration between researchers of the physical and mathematical communities. It will also offer the opportunity to discuss recent advances on both the scientific and application sides of the problem, associated to seismic wave propagation, acquisition, modelling, and processing technologies.