Wavefields

Deterministic and Artificial Intelligence Applications in
Seismic, Petrophysics, Geostatistics

Specialization / research stage for geoscientists, engineers and environmental scientists.

Pre and Post-Doctor 3-months stage starting on 1st october 2019.

Late registrations accepted until the 25th october 2019 for 2nd phase of stage

Financial support request for the course should arrive before the 20th october 2019.

This course is opened for doctorands and professionals willing to enter into the future of scientific development concerning the broad field of artificial intelligence applied to deep exploration sciences (seismic, petrophysics, geostatistics, reservoir modeling).

PROGRAM:

Module AI1
Module AI2

The course will start with theoretical reviews of seismic inversion, general and carbonate petrophysics with related interpretation techniques and theoretical spatial statistics.

Most part of the course will deal with the theory of fully connected and convolutional neural networks (NN) and their optimization algorithms. Practical NN applications will be discussed for the solution of optimization problems related to seismic, petrophysics and static reservoir simulation.

The final week will be dedicated to the deep geothermal exploration as renewable energy source with introduction to thermodynamic simulation for efficiency optimization.

THE PROGRAM IS EXTRACTED FROM THE BASIC COURSES:

AI1 - Sciences and Technologies of the Petroleum and Geothermal Exploration

AI2 - Artificial Intelligence Applications for Geoscientists and Engineers

For financial support contact:
ai@wavefields.eu