Seismic Processing – Understanding what is migration and how it works…

About the course:
Seismic processing could be somehow difficult to understand and especially the so-called migration step. That course intends to explain intentions of migration and how it works with a minimum of formulae and equations, favoring visual demonstrations of migration algorithms and real-time imaging.
Attendees shall tackle ray-based Kirchhoff and RTM algorithms abilities and limits through case studies. Discussions about algorithms types, fold coverage, dip, aperture, parallel computing, etc. shall be part of that course to stick to Industry's standards.

Duration: 2 days.

Level: Intermediate.

Prerequisites:
It is highly recommended to have a basic knowledge of fundamentals and/or operational Geophysics and/or Geology.

Course objectives:
After attending that course, participants shall understand abilities and limitations of migration on a wide scope of algorithms, enabling them to supervise seismic processing follow-up.

Typical Attendees:
Subsurface E&P professionals with experience in Geophysics and Geology.

Agenda:
Day 1: Fundamentals of seismic wave propagation and imaging,
Day 2: Workshop on machines.

Instructor:
Ludovic Peignard has been a geophysicist for the Oil and Gas Industry since 2006, in charge of many geographic areas, working for GDFSUEZ and Total groups. He founded and coded, EarthQuick, a software solution to cope with needs of swift geodata integration and interpretation. He is a freelance instructor and a vacant teacher for IFP School and EOST in Geophysics.

Price:
4,000 EUR Tax Excluded, 8 attendees maximum, for the whole duration, excluding traveling and accommodation expenses.

Other Information:
Lecture could be made in English or French at the sole discretion of clients. Course media (slides and booklet) shall be written in English only. The booklet only shall be provided as a hard copy.
EarthQuick licenses are provided without extra costs, for the course duration only.
Attendees shall practice with EarthQuick Software for exercises, running EarthQuick on their own PC, compliant with following minimum requisites:
- OS: Windows 7, 8, 8.1 or 10,
- Free Space HD: 1 TB,
- Amount of RAM: 8 GB RAM,

- CPU speed: 2.4 GHz,
- CPU Core count: 2,
- Video Resolution: 1280x720.

As per request, that course could be appended to a global course on 2 wks, about seismic technologies, from acquisition on the field to interpretation on machines.