

AVO + Seismic Inversion

Teamwork: Summary/Presentation of learning points **previous** day

Part 1

08:30-09:00 Introduction to the course: Biography, Program, Moodle, **Teams**
09:00-10:00 The world as seen by a geophysicist, Geophysical Methods
10:00-10:30 Ex: Resolution I
10:30-11:00 Seismic Workflow, QI
11:00-11:15 Refreshments
11:15-11:45 Ex: Resolution II
11:45-12:15 Resolution (PSF)
12:15-13:00 Ex: Lithology Mixtures
13:00-14:00 Lunch
14:00-14:30 **Videos: Rock Physics, EAGE Gassmann Fluid Replacement, Effective Media**
14:30-15:00 Rock Physics
15:00-15:15 Refreshments
15:15-15:45 AVO & Converted Waves
15:45-16:30 Ex: Fluid Mixtures
16:30-17:00 Quiz 1
Team a: Preparation Summary of day 1

Part 2

08:30-08:45 Team a: Summary of day 1
08:45-09:45 Tuning (S&B)
09:45-11:00 Ex: Rock Physics
11:00-11:15 Refreshments
11:15-11:45 Rock Physics templates
11:45-13:00 Ex: Tuning Wedge
13:00-14:00 Lunch
14:00-14:15 **Videos: EAGE AVO**
14:15-15:00 AI, EI, EEI, EPI
15:00-15:15 Refreshments
15:15-15:45 Ex: Tuning AVA
15:45-16:00 Lambda-Mu-Rho
16:00-16:45 Ex: AVA
16:45-17:00 Quiz 2
Team b: Preparation Summary of day 2

Part 3

08:30-08:45 Team b: Summary of day 2
08:45-09:45 Inhomogeneity & Anisotropy
09:45-11:00 Ex: AVA-NMO-Azi
11:00-11:15 Refreshments
11:15-12:00 Ex: AVA Rpp
12:00-12:30 Inversion, Attribute selection
12:30-13:00 Ex: Effective Media
13:00-14:00 Lunch
14:00-14:15 **Videos: EAGE Wave Equation AVO**
14:15-15:00 Ex: AVA Rss
15:00-15:30 Mult-Physics Inversion
15:30-15:45 Refreshments
15:45-16:45 Ex: AVA Rps
16:45-17:00 Quiz 3
Team c: Preparation Summary of day 3

Part 4

08:30-08:45 Team c: Summary of day 3

08:45-09:45 Machine Learning

09:45-10:15 Ex:

10:15-11:00 ML AVO Tutorial I&II

11:00-11:15 Refreshments

11:15-12:45 Ex: AVA ΔR_{pp}

12:45-13:00 FWI

13:00-14:00 Lunch

14:00-14:30 Videos: Activation Functions, Classification, You ain't seen nothing yet

14:30-15:30 Ex: AVA ΔR_{ss}

15:30-15:45 Refreshments

15:45-16:30 Case Studies

16:30-16:45 Ex: ChatGPT

16:45-17:00 Quiz 4