



2020 ANNUAL MEETING
Forum for Exploration and Development Geophysics Education and Research (EDGER)

AGENDA

Friday, March 27th, 2020 (Online Annual Meeting)

8:00 AM **Zoom meeting opens**

8:30–9:00 AM Welcome addresses (Mrinal Sen, Nicola Tisato, and Kyle Spikes)

Session I: Rock physics and reservoir characterization

09:00–09:25 AM Laboratory experiment of low-frequency attenuation in fractured Brea Sandstone part 1: Low-frequency module – Ken Ikeda
09:25–09:50 AM Targeted computed tomography, Part II: Addressing issues with quantitative CT scanning – Eric Goldfarb
09:50–10:15 AM Image analysis for depth-dependent quantitative grain-size distribution for a Permian Basin Reservoir – David Tang
10:15–10:40 AM Well-log facies classification using a semi-supervised algorithm – Wei Xie
10:40–10:50 AM **Break**
10:50–11:15 AM Deformation and permeability in tight rock formations by means of X-ray tomography and tri-axial testing – Omar Alamoudi
11:15–11:40 AM Measurements of seismic wave attenuation in bubbly liquids: The WIGED mechanism – Ziqi Jin

Session II: New students

11:40–11:45 PM Dmitri Voytan
11:45–11:50 PM Arnab Dhara
11:50–12:00 PM Reservoir parameter estimation by seismic inversion and machine learning – Jackson Tomski

12:00 PM **Zoom meeting closes**

12:00–01:00 PM **Lunch**

12:45 PM **Zoom meeting reopens**

Session III: Numerical methods: Wavefield simulations, inversion methods, and machine learning

01:00–01:25 PM Mini-batch least-squares reverse time migration in a deep learning framework – Janaki Vamaraju
01:25–01:50 PM Pre-stack seismic inversion from deep learning with cross-shape deep Boltzmann machine – Son Phan
01:50–02:15 PM Density estimation by trans-dimensional AVA inversion: A field data example – Reetam Biswas
02:15–02:40 PM Full waveform inversion using machine-learning methods – Ricardo Braganca
02:40–02:50 PM **Break**
02:50–03:15 PM A phase space beam summation imaging in inhomogeneous media – Ram Tuvi
03:15–03:40 PM Meshfree modeling using p-refined radial basis-finite differences – Pankaj Mishra
03:40–04:05 PM Full-waveform inversion with a gradient based Markov chain Monte Carlo method and uncertainty quantification, application on Axial seamount – Zeyu Zhao
04:05–04:15 PM Wrap up – Mrinal Sen, Kyle Spikes, and Nicola Tisato
04:15 PM Adjourn
04:15 PM **Zoom meeting closes**