UNIVERSITY of HOUSTON

SEG Technical Program – UH Oral and Poster Presentations

| | TITLE | AUTHOR | START TIME | LOCATION | ТҮРЕ |
|---------|---|--|-------------|-----------|--------|
| | Joint inversion for microseismic event positions and velocity structures by combining multiscale deformable-layer tomography and master station earthquake location method | Zhili Wei, Yingcai Zheng, Hua-Wei Zhou, Hu Hao, August Lau | 1:25:00 PM | 144/145 | ORAL |
| | Identifying unconventional potential using seismic inversion and neural networks: An Eagle Ford Shale study | Xavier Refunjol | 1:25:00 PM | 155 | ORAL |
| | A layer-cell approach of near-surface first-arrival tomography | Yukai Wo, Hua-wei Zhou | 1:25:00 PM | 150 | ORAL |
| DAY | Well-log lithology discrimination using elastic attributes only | Elita De Abreu, John Castagna | 1:50:00 PM | 168 | ORAL |
| MONDAY | Joint inversion for anisotropic velocity model and event locations using S-wave splitting measurements from downhole microseismic data | Duo Yuan, Robert Stewart, Aibing Li | 2:15:00 PM | 144/145 | ORAL |
| | An unmanned aerial vehicle with vibration sensing ability (seismic drone) | Robert Stewart, Li Chang, Srikanth Sudarshan, Aaron | 3:20:00 PM | 148 | ORAL |
| | Time-lapse inversion of steam chamber in heavy oil reservoir | Hemin Yuan, De-Hua Han | 3:20:00 PM | Lobby D/C | POSTER |
| | Prestack-image based correlative least-squares reverse time migration | Xuejian Liu, Hu Hao* | 3:45:00PM | Lobby D/C | POSTER |
| | Rock-physics based prediction of hydraulic permeability and thermal conductivity of anisotropic clastic rocks from logging data | Irina Bayuk, Gennady Goloshubin* | 4:10:00 PM | 167 | ORAL |
| | Least-squares reverse time migration with Hessian preconditioning | Wei Huang, Pan Deng, Hua-Wei Zhou | 8:25:00 AM | 171/173 | ORAL |
| TUESDAY | Near-surface geophysical imaging for groundwater exploration: La Marque, Texas | Abigail M. Ross, Robert R. Stewart, Li Chang | 8:50:00 AM | 147/154 | ORAL |
| | The first inverse-scattering-series internal multiple elimination method for a multidimensional subsurface | Yanglei Zou, Chao Ma, Arthur Weglein | 10:45:00 AM | 142 | ORAL |
| | Effects of fracture density on P-wave reflection coefficients for shale/sand model with HTI anisotropy | Wei Huang, Pan Deng, Hua-Wei Zhou | 10:45:00 AM | Lobby D/C | POSTER |
| | The influence of CEC, salinity, mineralogy, and | Mohab Dessouki, | | | |

| | anisotropy | Hua-Wei Zhou | | | |
|--|---|---|-------------|-----------|--------|
| | The influence of CEC, salinity, mineralogy, and grain-size distribution on the stress-dependent petrophysical properties on reconsolidated mudrocks | Mohab Dessouki, Michael Myers, Lori Hathon | 10:45:00 AM | 143/149 | ORAL |
| | Correlations between the seismic anisotropy parameters for shales | Fuyong Yan, De-Hua Han | 11:10:00 AM | 167 | ORAL |
| | Channel characterization of drill string acoustic wireless telemetry using a novel high-precision integration algorithm | Shubin Zeng*, Jiefu Chen | 11:35:00 AM | 141 | ORAL |
| | Green's theorem-based onshore preprocessing: A reduced data requirement assuming a vacuum/earth model for the air/earth interface and the evaluation of the usefulness of that assumption | Jing Wu, Arthur Weglein | 11:35:00 AM | 140 | ORAL |
| | Examining the interdependence and cooperation of the terms in the distinct inverse-scattering subseries for free-surface multiple and internal multiple removal | Chao Ma, Arthur Weglein | 11:35:00 AM | 142 | ORAL |
| | Reflectivity of isotropic-fractured layer | Anna Krylova, Gennady Goloshubin | 1:50:00 PM | 150 | ORAL |
| | Least-squares reverse time migration of controlled order multiples | Yike Liu, Xuejian Liu, Yingcai Zheng*, Hao Hu* | 1:50:00 PM | 171/173 | ORAL |
| | Reservoir quality indicators from well logs and 3D–3-C seismic in the Marcellus Shale | Fabiola Ruiz, Robert Stewart | 1:50:00 PM | Lobby D/C | POSTER |
| | Controls on acoustic anisotropy observed in unconsolidated sands using laboratory measurements and digital rock technology | Lori Hathon, Michael Myers | 2:15:00 PM | 166 | ORAL |
| | Introduction of upscaling methods derived from the simple averaging method and a comparison with the Backus method of upscaling | Ezzedeen Alfataierge, Evgeny Chesnokov, Yuliya Gorb | 3:20:00 PM | 150 | ORAL |
| | Mineralogical effects on elastic properties and anisotropies of organic shales | Xuan Qin, De-Hua Han, Fuyong Yan | 3:20:00 PM | 166 | ORAL |
| | A clear example of using multiples to enhance and improve imaging | Chao Ma, Arthur Weglein | 3:45:00 PM | Lobby D/C | POSTER |
| | Seismic characterization of fractures using exact localized waves: Gaussian wave packet | Yinshuai Ding, Yingcai Zheng, Hua-Wei Zhou, Hao Hu | 4:10:00 PM | 155 | ORAL |
| | The impact of prerequisites (ghosts, source wavelet, and radiation pattern) on the inverse scattering series free-surface multiple-elimination algorithm | Jinlong Yang | 4:10:00 PM | Lobby D/C | POSTER |
| | The first migration method that is equally | Arthur Weglein, James | | | |

The first migration method that is equally

algorithm

| | algorithm | | | | |
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| TUESDAY | The first migration method that is equally effective for all acquired frequencies for imaging and inverting at the target and reservoir | Arthur Weglein, James Mayhan, Yanglei Zou, Qiang Fu, Fang Liu, Jing Wu, Chao Ma, Xinglu Lin | 4:35:00 PM | 171/173 | ORAL |
| | Incorporating a 3D point source in the ISS FSME for a 1D subsurface and its influence on the subsequent processing | Xinglu Lin, Arthur Weglein | 4:35:00 PM | Lobby D/C | POSTER |
| | A rational series approach for solving poroelastic wave equation with dynamic permeability | Zhao Li, Donald Kouri, Evgeny Chesnokov | 8:00:00 AM | 161 | ORAL |
| | Full-waveform inversion by multiscale temporal integration | Pan Deng, Wei Huang, Hua=Wei Zhou | 8:25:00 AM | 143/149 | ORAL |
| | Locating and characterizing burials using 3D ground-penetrating radar (GPR) and terrestrial laser scanning (TLS) at the historic Mueschke Cemetery, Houston, Texas | Azie Aziz, Robert Stewart, Susan Green | 8:25:00 AM | 147/154 | ORAL |
| | Electromagnetic tunnel detection using a magnetic-dipole source in three-dimensional space | John Neese, David Jackson, Yingcai Zheng | 8:25:00 AM | Lobby D/C | POSTER |
| | Multiphysics modeling of carbonates calibrated with NMR and micro=CT | Alireza Shahin, Micheal Myers, Lori Hathon | 8:25:00 AM | 167 | ORAL |
| DAY | 2D Green's theorem receiver deghosting in the (x= omega) domain using a depth-variable cable towards on-shore and ocean-bottom application with variable topography | Zhen Zhang, Arthur Weglein | 8:25:00 AM | 140 | ORAL |
| WEDNESDAY | Analysis of seismic anisotropy parameters for sedimentary strata | Fuyong Yan, De-Hua Han, Xuelian Chen | 8:50:00 AM | Lobby D/C | POSTER |
| > | Sensitivity analysis of seismic anisotropy parameter estimation | Fuyong Yan, De-Hua Han | 9:15:00 AM | 150 | ORAL |
| | Predicting deghosted reflection data for both pressure and multicomponent displacements at the ocean bottom | Jing Wu, Arthur Weglein | 10:20:00 AM | 140 | ORAL |
| | The significance and impact of incorporating a 3D point source in Green's theorem deghosting | Xinglu Lin, Arthur Weglein | 11:35:00 AM | 140 | ORAL |
| | Rastid/ଲincklation efunction and the set of | Song, W., H. Zhou, Z. ອ້ອນຢູ່ເກເຊັອນອກຢູ່ອອີນາຝູໃຫຼອກ Yan | 1:55:00 PM | 162 | ORAL |
| | Bapid simulation of resistivity well logging using a ROCK-physics modeling of shale during smectice to- hybridization of semianalytical and conventional linte transition finite-element schemes | Xuan Qin, De-Hua Han, Shubin Zeng, Jiefu Chen Fuyong Yan | 1:55:00 PM | 168 | ORAL |
| | The effect of CEC, salinity, mineralogy, and grain- Rioekៅផ្លាប់ជាមេរំលេចជាកេទូទៅចោះអាចជុំហាសទៅចោះectite-to- អាកេះខេត្តកាន់ដាច់ក្រed through multistage triaxial testing | Mohab Dessouki*, Xuan Qin, De-Hua Han, Michael Myers, Lori Fuyong Yan Hathon | 1:55:00 PM | 150 | ORAL |
| | Phase decomposition as a hydrocarbon indicator | Ramses Meza John | | | |

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| | The effect of CEC, salinity, mineralogy, and grain- | | | | |
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| | The effect of CEC salinity, mineralogy, and grain- size distribution on resedimented mudrock size distribution on resedimented mudrock strength obtained through multistage triaxial strength obtained through multistage triaxial testing | Mohab Dessouki*, Michael Myers, Lori Hathon | 2:20:00 PM | 167 | ORAL |
| | Phase decomposition as a hydrocarbon indicator: Phase decomposition as a hydrocarbon indicator: A case study A case study | Ramses Meza, John Ramses Meza, John Castagna* Castagna* | 3:10:00 PM | 140 | ORAL |
| | Total variation denoising of azimuthal resistivity inversion in geosteering | Qiuyang Shen, Jiefu Ehen, Zhu Han | 3:35:00 PM | 168 | ORAL |
| WEDNESDAY | Solving fractional Laplacian viscoacoustic wave equation using Hermite distributed approximating functional method | Jie ¥ae; Benald Keuri | 3:35:00 PM | 14 8 | ØRAL |
| WED | Analysis of oscillational behaviors of waves in gas- pocket reservoirs via decoupling wavefields | Рөпgŧhep Thongsang | 4:00:00 PM | Гөрр а В ∕€ | ₽اŦEŖ |
| | A new time-space domain dispersion-relation- A new time-space domain dispersion-relation- based implicit staggered-grid finite-difference based implicit staggered-grid finite-difference scheme for scalar wave-equation modeling scheme for scalar wave-equation modeling | Yaning Liu, Wen Hu* | 4:25:88 BM | Lebby B/E | ß8§ T er |
| | A novel formation model for electromagnetic telemetry including surface and innovative casing antenna system | Qiuzhao Dong, Jiefu Chen* | 4:25:00 PM | 168 | ORAL |
| | Rock-physics modeling of heavy oil sands | Hemin Yuan, De-Hua Han | 8:55:00 AM | 150 | ORAL |
| | Elastic properties of salt: Ultrasonic lab measurements and the Gulf of Mexico well log analysis | Jingjing Zong, Robert Stewart, Nikolay Dyaur | 8:55:00 AM | 167 | ORAL |
| | Determination of microseismic event back azimuth from S-wave splitting analysis | Duo Yuan, Aibing Li | 9:20:00 AM | 144/145 | ORAL |
| THURSDAY | Ultrasonic P-wave velocity and density of heavy oil–toluene mixture | De-Hua Han, Min Sun | 9:45:00 AM | 150 | ORAL |
| THI | Compressional velocity of heavy oil at high- temperature condition | Min Sun, De-Hua Han | 10:10:00 AM | 150 | ORAL |
| | Removal of Doppler effects from marine vibrator OBN seismic | Chen Qi, Fred Hilterman | 10:10:00 AM | 163/165 | ORAL |
| | An investigation of static and dynamic data using multistage triaxial tests | Abdullah Bilal, Michael Myers, Lori Hathon | 11:00:00 AM | 150 | ORAL |
| | A cost-effective scheme for reverse time migration angle gathers | Qiang Fu, Arthur Weglein | 12:35:00 AM | 171/173 | ORAL |