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Ahmed Al-Eidan, Abdul Aziz Al-Fares, Narhari Srinivasa Rao\*, Saifullah Khan Tanoli, Bashar Abdul Razak Al-Qadeeri, and Mohamed Hafez Abdul Razak, Kuwait Oil Company; Haiqing Wu, ChevronTexaco

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*Ultra-deepwater 4C offshore Brazil*  
Bill Cafarelli\*, Santi Randazzo, and Steve Campbell, PGS; Jorge Fiori Fernandes Sobreira, Marcos A. Gallotti Guimaraes, Carlos Rodriguez, Paulo Johann, and Carlos Theodoro, Petrobras

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Jeff Pan, Barbara Barnes, Fanchen Kong, Mark Chang, and Victor Kriechbaum, Kerr-McGee Corp; Zhiming Li, Gary Rodriguez, Lin Zhang, Itze Chang, and Chen-bin Su, Parallel Data Systems
- 581 CH 3.2 (0464-0467)**  
*Sensitivity analysis of factors controlling AVA simultaneous inversion of 3D partially stacked seismic data: application to deepwater hydrocarbon reservoirs in the central Gulf of Mexico*  
Arturo Contreras\* and Carlos Torres-Verdín, U of Texas-Austin; Tim Fasnacht, Anadarko Petroleum Corp
- 586 CH 3.3 (0468-0471)**  
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Arturo Contreras\* and Carlos Torres-Verdín, U of Texas-Austin; Tim Fasnacht, Anadarko Petroleum Corp
- 591 CH 3.4 (0472-0475)**  
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Mark A. Davies\*, ARKeX Limited; John O'Brien, Anadarko Petroleum Corp
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Patricia Montoya\*, Robert Tatham, William Fisher, and Ronald Steel, U of Texas-Austin; Michael Hudec, Bureau of Economic Geology
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Mike Perz\*, Geo-X Systems; Larry Mewhort, Husky Energy; Gary Margrave, U of Calgary; Laurie Ross, Geo-X Systems
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Satinder Chopra\* and Vladimir Alexeev, Arcis Corp; Joanne Lanteigne and Yong Xu, Paradigm Geophysical
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Jonathan Anderson\*, Andrew Smart, and Ayman Shabrawi, WesternGeco; Adel El-Emam and Ghassan Rached, Kuwait Oil Company

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 A. H. Thompson\*, formerly ExxonMobil Upstream Research Co
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*Three dimensional imaging of marine CSEM data*  
J. J. Carazzone\*, O. M. Burtz, K. E. Green, and D. A. Pavlov, ExxonMobil Upstream Research Company; C. Xia, ExxonMobil Exploration Company
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*Shear-wave azimuthal velocity anisotropy in a Williston Basin 9-C 3-D survey*  
John Stevens, Geocenter, Inc; Bryan DeVault, Vecta Exploration

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- 1136 MC 2.1 (0904-0907)**  
*Vector fidelity of land multicomponent measurements in the context of the earth-sensor system: Misconceptions and implications*  
Donald N. Burch\*, Alexander S. Calvert, and John M. Novak, GX Technology
- 1141 MC 2.2 (0908-0911)**  
*Comparison between geophones and two MEMS types and repeatability of land data*  
Shuki Ronen, Lynn Comeaux, Mark Cartwright, John Gibson, Roy Burnett, Jim Roy, and Howard Watt, Veritas
- 1146 MC 2.3 (0912-0915)**  
*P-SV 4C rotation analysis compared to direct shear wave 4C rotation analysis and sensitivity to acquisition geometry*  
Jason E. Gumble\* and Robert H. Tatham, Jackson School of Geosciences, U of Texas-Austin
- 1151 MC 2.4 (0916-0919)**  
*Evaluation of 3C sensor coupling using ambient noise measurements*  
Howard Watt\*, John Gibson, Roy Burnett, and Shuki Ronen, Veritas DGC
- 1155 MC 2.5 (0920-0923)**  
*Multi-component seismic in rough terrain: an example from Wyoming Green River basin*  
Shuki Ronen, Chris Ansorger, and Mark Wagaman, Veritas DGC; Marvin L. Johnson, ExxonMobil Upstream Research Company
- 1160 MC 2.6 (0924-0927)**  
*Full-wave 3D seismic survey designs and operations for the marine environment*  
James A. Musser\*, Input/Output
- 1164 MC 2.7 (0928-0931)**  
*An SVD-polarization filter for ground roll attenuation on multicomponent data*  
Robert Kendall\*, Side Jin, and Shuki Ronen, Veritas GeoServices; Kristof De Meersman, School of Earth and Environment, U of Leeds
- 1169 MC 2.8 (0932-0934)**  
*Vector filters and implications for new seismic acquisition and processing techniques*  
C. Jason Criss, Tagir Galikeev, and Marty Williams, I/O

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*Converted-wave true amplitude prestack Kirchhoff migration*  
Xiaogui Miao\*, Sam Gray, Yu Zhang, and Robert Kendall, Veritas DGC

- 1178 MC 3.2 (0939-0942)**  
*PS multicomponent time processing over a mud volcano in the Caspian Sea*  
 Emma Luke\*, WesternGeco; Jack Bouska, BP; Andy Ashby, WesternGeco; Rodney Johnston, BP; Tony Probert, WesternGeco
- 1183 MC 3.3 (0943-0946)**  
*Semiautomatic PP-PS stereotomography: application to the synthetic Valhall dataset*  
 Gilles Lambare\*, École des Mines de Paris; Mathias Alerini, Sintef Petroleum Research
- 1188 MC 3.4 (0947-0950)**  
*Wave-equation common-angle gathers for converted waves*  
 Paul Sava and Sergey Fomel, U of Texas-Austin
- 1193 MC 3.5 (0951-0954)**  
*Relative polarity in correlating P-P and P-S events and approximations to RPS for polarity and AVO*  
 R. James Brown\*, U of Calgary and U of the Faroe Islands; Alexandru Vant, U of Calgary and Enervant Consulting Ltd
- 1199 MC 3.6 (0955-0958)**  
*Enhanced PS-wave images of deep-water, near-seafloor geology from 2-D 4-C OBC data in the Gulf of Mexico*  
 Milo M. Backus, Paul E. Murray\*, Bob A. Hardage, and Robert J. Graebner, Bureau of Economic Geology, Jackson School of Geosciences, U of Texas-Austin
- 1204 MC 3.7 (0959-0962)**  
*Converted-waves angle-domain common-image gathers*  
 Daniel A. Rosales\* and Biondo Biondi, Stanford U
- 1208 MC 3.8 (0963-0966)**  
*Imaging downgoing waves from ocean bottom stations*  
 Shuki Ronen, Lynn Comeaux, and Xiao-Gui Miao, Veritas DGC

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*Converted-wave elastic impedance inversion in practice: A case study in the Gulf of Mexico*  
 Haibin Xu\*, Andrew E. Hannan Sr, Jianchun Dai, Adam Koesoemadinata, and Keshan Zou, WesternGeco
- 1218 MC 4.2 (0971-0974)**  
*Shear-wave anisotropy from far-offset VSP*  
 Ran Zhou\*, Xiaomin Zhao, and David Dushman, VSFusion; Peter Janak, Total E&P USA
- 1223 MC 4.3 (0975-0978)**  
*A tale of two surveys: experiences processing two similar but different land 3D-3C MEMS surveys*  
 Alexander S. Calvert\*, John M. Novak, John Maher, and Donald N. Burch, GX Technology; David Bird, Samson Larson, and Ron Larson, Apache Canada

- 1228 MC 4.4 (0979-0982)**  
*Analysis of P-wave and Converted-wave 3D seismic data. Anadarko Basin, Oklahoma, USA*  
S. L. Roche, M. Wagaman, and H. J. Watt, Veritas DGC
- 1233 MC 4.5 (0983-0986)**  
*Improved sihil image from 4C full azimuth node data*  
Marco Vázquez García, Pemex, CNPS, Villahermosa; Francisco Maya and Carlos Federico Ruiz Torres, Pemex E & P; Eivind W. Berg, Claude Vuillemoz, and Atle Fyhn, SeaBed Geophysical
- 1238 MC 4.6 (0987-0990)**  
*Multicomponent VSP imaging of tight gas sands*  
John O'Brien\* and Ron Harris, Anadarko Petroleum Corp
- 1243 MC 4.7 (0991-0994)**  
*A proposed workflow for reservoir characterization using multicomponent seismic data*  
Paul F. Anderson\*, Louis Chabot, and F. David Gray, Veritas
- 1247 MC 4.8 (0995-0998)**  
*Delineating a sand reservoir using inversion of 3C-3D seismic data*  
Chuandong (Richard) Xu\* and Robert R. Stewart, Crewes Project, U of Calgary

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- 1252 MC P1.1 (0999-1002)**  
*Orthogonal base rotation method for detecting fracture with converted-wave*  
Zhongyu Huang, Southwest Petroleum Inst, China, SINOPEC Nanjing Geophysical Prospecting Inst, China; Jinzhou Zhao and Shijun Zhu, Southwest Petroleum Inst, China
- 1257 MC P1.2 (1003-1006)**  
*3D PS-wave data processing technique and its application in Erdos Basin, China*  
Xiangyu Guo\*, Xiaosong Jiang, Haitao Dai, and Xukui Fen, BGP, CNPC
- 1262 MC P1.3 (1007-1009)**  
*The equation of conversion point for the converted wave on a dipping layer*  
Young-Fo Chang\* and Yi-Jun Tang, Inst of Applied Geophysics, National Chung Cheng U
- 1266 MC P1.4 (1010-1013)**  
*Accuracy of a simplified moveout formula for PS converted-waves in multi-layered media*  
Hengchang Dai\* and Xiang-Yang Li, British Geological Survey
- 1271 MC P1.5 (1014-1017)**  
*Estimating polarization attributes with an adaptive covariance method in the wavelet domain*  
Mamadou S. Diallo, Michail Kulesh, Matthias Holschneider, Kristina Kurrenaya, and Frank Scherbaum, U of Potsdam

- 1276 MC P1.6 (1018-1021)**  
*A multistep approach to multicomponent seismic image registration with application to a west Texas carbonate reservoir study*  
Sergey Fomel\*, Milo Backus, Khaled Fouad, Bob Hardage, Bureau of Economic Geology, U of Texas-Austin; Glenn Winters, Fasken Oil and Ranch

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*MAM and MT explorations in the Sibayak geothermal field*  
Supriyanto Suparno\*, Hideki Mizunaga, and Keisuke Ushijima, Kyushu U, Japan; Yunus Daud, U of Indonesia
- 1291 MIN P1.4 (1030-1032)**  
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Qingyun Di\*, Ruo Wang, and Guangjie Wang, Inst of Geology and Geophysics, Chinese Academy of Sciences

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Derecke Palmer\*, U of New South Wales; Leonie Jones, Geoscience Australia
- 1305 NSE 1.3 (1041-1044)**  
*Unique near-surface seismic-reflection characteristics within an abandoned salt-mine well field, Hutchinson, Kansas*  
Richard D. Miller\*, Julian Ivanov, Don W. Steeples, W. Lynn Watney, and Theresa R. Rademacker, U of Kansas
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Xin-Gong Li, U of Houston and IntSeis, Inc; De-Hua Han and Jiajin Liu, U of Houston; Donn McGuire, Anadarko Petroleum

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***Quantifying reservoir properties of the East Texas Woodbine through rock physics and multiattribute seismic inversion***

Ron McWhorter\* and Duane Pierce, Devon Energy Corp; Niranjana Banik, Haibin Xu, George Bunge, Antoun Salama, Adam Koesoemadinata, Robert Spark, Ben Flack, Ran Bachrach, Mita Sengupta, and Randy Utech, WesternGeco

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Charles Ojo, Piero Licalsi, and Serafi no Gemelli, Nigerian Agip Oil Company; Mike Atkins\* and Tue Larsen, Veritas DGC

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P. Nivlet\*, N. Lucet, T. Tonellot, E. Albouy, O. Lerat, B. Doligez, F. Roggero, IFP; F. Lefeuvre, J.L. Piazza, E. Brechet, O. Duplantier, J. Vittori, P. Berthet, Total

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P. Nivlet\*, N. Lucet, T. Tonellot, E. Albouy, O. Lerat, B. Doligez, F. Roggero, IFP; F. Lefeuvre, J.L. Piazza, E. Brechet, O. Duplantier, J. Vittori, P. Berthet, Total

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De-hua Han, U of Houston; Michael Batzle, Colorado School of Mines

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- 1682 RC 2.3 (1339-1342)**  
*Volume-based rock property predictions and quantifying uncertainty*  
James S. Schuelke and Amy Ruf, ExxonMobil Upstream Research Company; Janel Andersen and Linda Corwin, ExxonMobil Exploration Company
- 1687 RC 2.4 (1343-1346)**  
*Joint stochastic inversion of 3D pre-stack seismic data and well logs for high-resolution reservoir characterization and petrophysical modeling: application to deepwater hydrocarbon reservoirs in the central Gulf of Mexico*  
Arturo Contreras\* and Carlos Torres-Verdín, U of Texas-Austin; William Chesters and Knut Kvien, Fugro-Jason Rotterdam; Tim Fasnacht, Anadarko Petroleum Corp
- 1692 RC 2.5 (1347-1350)**  
*The impact of high-resolution seismic data on carbonate reservoir description, offshore Mexico*  
Richard Salter\*, Dianna Shelander, Marc Beller, Ben Flack, Diana Gillespie, and Nick Moldoveanu, WesternGeco Reservoir Services; Francisco Pineda and Jose Camara, Pemex
- 1697 RC 2.6 (1351-1354)**  
*Using geostatistical inversion of seismic and borehole data to generate reservoir models for flow simulations of Magnolia Field, deepwater Gulf of Mexico*  
Peter McCarthy, John Brand, Bob Paradiso, John Ezekwe, Nick Wiltgen, and Alex Bridge, Devon Energy Corp; Richard Willingham, CR Willingham & Assoc; Mark Bogaards\*, Fugro-Jason



**1702 RC 2.7 (1355-1358)**  
*Petrophysical seismic inversion*  
Thierry Coleou, Fabien Allo, and Raphael Bornard, CGG; Jeff Hamman, and Don Caldwell, Marathon Oil

**1707 RC 2.8 (1359-1361)**  
*Seismic trace matching to well logs in a weakly non-linear earth*  
John B. DuBose, Jr., Geotrace Technologies

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**1711 RC 3.1 (1362-1365)**  
*Integrated geologic model and statistical reservoir simulation: Triton Field, Gulf of Mexico*  
Gene Monson\* and Diane Bustamante, Pioneer Natural Resources

**1716 RC 3.2 (1366-1369)**  
*Fully integrated reservoir flow, geomechanics and seismic modeling: A tool for better reservoir characterization and geomechanical prediction using 4D seismic*  
X. Gai, J. Rungamornrat, H. Klie\*, W. Bangerth, and M. F. Wheeler, Center for Subsurface Modeling; P. L. Stoffa, M.K. Sen, and R. Seifoullaev, Inst for Geophysics, U of Texas-Austin

**1721 RC 3.3 (1370-1373)**  
*Application of multipoint geostatistics to honor multiple attribute constraints applied to a deepwater outcrop analog, Tanqua Karoo Basin, South Africa*  
Daniel Tetzlaff, Roy Davies, David McCormick, Claude Signer\*, Piotr Mirowski, and Nneka Williams, Schlumberger-Doll Research; David Hodgson, Liverpool U; James Brady, Schlumberger Information Solutions

**1726 RC 3.4 (1374-1377)**  
*Real time update of a reservoir property model in geosteering applications*  
S. Pedersen, P. Tennebo, L. Sonneland, and A. Carrillat, Schlumberger Stavanger Research

**1731 RC 3.5 (1378-1381)**  
*How to build a geological and geophysical realistic synthetic seismic data set for benchmarking reservoirs studies*  
Aline Bourgeois, Karine Labat, Tristan Euzen, Pascal Froidevaux, and Christian Le Bras, Inst Français du Pétrole, France

**N/A RC 3.6 (Withdrawn)**  
*Seismic reflections of methane hydrate*  
Ingrid Cordon, Jack Dvorkin, and Gary Mavko, Stanford Rock Physics Lab

**1736 RC 3.7 (1382-1385)**  
*Sub-seismic deformation processes in clastic reservoirs derived from dip and azimuth steered coherency processing*  
H. Endres, TEEC, RWTH; R. Samiee, TEEC; T. Lohr and C. M. Krawczyk, GFZ; D. C. Tanner, RWTH; H. Trappe, TEEC; O. Oncken, GFZ; P. A. Kukla, RWTH

- 1741 RC 3.8 (1386-1389)**  
*The mechanism of recovery of residual oil by elastic waves and vibrations*  
Igor Beresnev\*, Iowa State U; Dennis Vigil and Wenqing Li, Iowa State U

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- 1746 RC 4.1 (1390-1392)**  
*Predicting vshale and porosity using cascaded seismic and rock physics inversion*  
Rebecca Saltzer\* and Chris Finn, ExxonMobil Upstream Research Company
- 1750 RC 4.2 (1393-1396)**  
*Estimating heterogeneous reservoir permeability from induced microseismicity*  
Jean-Jacques Royer, CRPG/CNRS, gOcad Research group, Nancy School of Geology; Jean-Charles Voillemont, Earth Decision
- 1755 RC 4.3 (1397-1400)**  
*VP/VS characterization of a heavy-oil reservoir*  
Larry Lines\*, Ying Zou, Albert Zhang, Kevin Hall, and Joan Embleton, U of Calgary; Bruce Palmiere, Carl Reine, and Paul Bessette, Nexen, Inc; Peter Cary and Dave Secord, Sensor Geophysical
- 1760 RC 4.4 (1401-1404)**  
*Vp-Vs ratio sensitivity to pressure, fluid, and lithology changes in tight gas sandstones*  
Eugenia Rojas\*, Thomas L. Davis, Michael Batzle, and Manika Prasad, Colorado School of Mines; Reinaldo J. Michelena, iReservoir.com, Inc
- 1765 RC 4.5 (1405-1408)**  
*Measures of scale based on the wavelet scalogram and its applications to gas detection*  
Hongbing Li\*, China U of Mining & Technology and Petrochina; Wenzhi Zhao, Hong Cao, and Fengchang Yao, Petrochina
- 1770 RC 4.6 (1409-1412)**  
*Fracture spacing and orientation estimation from spectral analyses of azimuth stacks*  
Rama Rao, Mark Willis\*, Dan Burns, and M. Nafi Toksoz, Earth Resources Lab, MIT; Laura Vetri, Agip E.N.I.
- 1775 RC 4.7 (1413-1416)**  
*Improved fracture and matrix porosity characterization within Jurassic reservoir using seismic attributes*  
Ahmed Jaber Al-Eidan, Nikhil C. Banik\*, Sunil Kumar Singh, and Al-Ajmi Neema Hussain Abdullah, Kuwait Oil Company
- 1780 RC 4.8 (1417-1420)**  
*Using frequency-dependent seismic attributes in imaging of a fractured reservoir zone*  
Gennady Goloshubin\*, U of Houston; Dmitry Silin, U of California-Berkeley

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- 1786 RC P1.1 (1421-1424)**  
*Reservoir seismic characterization using rock physics, seismic attributes and spectral decomposition in Puerto Colon oil field, Colombia*  
Frank Gomez\*, Ecopetrol; John Castagna, U of Oklahoma
- 1791 RC P1.2 (1425-1428)**  
*Integrated reservoir heterogeneity delineation of Coalinga field*  
Sailendra N. Mahapatra\* and Matthias G. Imhof, Virginia Tech; William Kempner, ChevronTexaco
- 1796 RC P1.3 (1429-1432)**  
*Characterization of thin beds through joint time-frequency analysis applied to a turbidite reservoir in Campos Basin, Brazil*  
Marcílio Castro de Matos\*, Military Inst of Engineering and PUC-RIO; Paulo Léo Manassi Osório, PUC-RIO; Evaldo Cesário Mundim, and Marco A. Schreiner Moraes, Petrobras R&D
- 1801 RC P1.4 (1433-1436)**  
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Ziqiu Xue\*, Research Inst of Innovative Technology for the Earth (RITE); Daiji Tanase, Engineering Advancement Assoc of Japan (ENAA); Hideki Saito and Dai Nobuoka, OYO Corp; Jiro Watanabe, Geophysical Surveying Corp
- 1806 RC P1.5 (1437-1440)**  
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Zhangshuan Hou and Yoram Rubin, U of California-Berkeley; G. Michael Hoversten, Jinsong Chen, and Don Vasco, Lawrence Berkeley Nat'l Lab
- 1812 RC P1.6 (1441-1444)**  
*Ray-based stochastic inversion for reservoir parameters using 1D convolutional forward modeling*  
Dennis van der Burg\*, Delft U of Technology; Arie Verdel, Shell E&P Technology; Kees Wapenaar, Delft U

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Ravi Shekhar\* and Richard L. Gibson Jr., Texas A&M U
- 1822 RC P2.2 (1449-1452)**  
*Time-lapse seismic attribute interpretation of a turbidite analog reservoir model using neural networks*  
Matthew S. Casey\*, Montana Tech; Don Sherlock, CSIRO Petroleum; Curtis A. Link, Montana Technology
- 1827 RC P2.3 (1453-1456)**  
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Hung-Liang Lai\* and Richard L. Gibson Jr., Texas A&M U

**1832 RC P2.4 (1457-1460)**  
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Guangzhi Zhang, Yongshe Liu, and Xingyao Yin, U of Petroleum, China

**1837 RC P2.5 (1461-1464)**  
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**1842 RC P2.6 (1465-1468)**  
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Maria Rojas\* and De-hua Han. University of Houston

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**1852 RP 1.2 (1473-1476)**  
*Seismic properties of unconsolidated sands: Tangential stiffness,  $V_p/V_s$  ratios and diagenesis*  
Per Avseth\*, Hydro Research Center; Ran Bachrach, Reservoir Services, WesternGeco/Schlumberger

**1857 RP 1.3 (1477-1480)**  
*Pore shape effect on elastic properties of carbonate rocks*  
Mritunjay Kumar\* and De-hua Han, Rock Physics Lab, U of Houston

**1862 RP 1.4 (1481-1484)**  
*Effective medium solution for pressure sensitivity of seismic velocities in granular media*  
Vimal Saxena\*, Oil & Natural Gas Corp

**1867 RP 1.5 (1485-1488)**  
*Extrapolation to critical porosity with the Hashin-Shtrikman lower bound*  
Brackin Smith\* and Leo Brown, ConocoPhillips

**1872 RP 1.6 (1489-1492)**  
*Elastic anisotropy of porous and fractured rocks under stress*  
Serge A. Shapiro\*, Katharina Becker, Freie Universität Berlin; Sergei Stanchits, Geoforschungs Zentrum Potsdam

**1877 RP 1.7 (1493-1496)**  
*Viscous fluid effects on wave propagation: A finite-difference modeling approach in combination with flow simulations*  
Erik H. Saenger\* and Serge A. Shapiro, Fachbereich Geophysik, Freie U Berlin; Youngseuk Keehm, Stanford Rock Physics Lab, Stanford U

- 1883 RP 1.8 (1497-1500)**  
*Dynamic permeability of random porous rocks and its seismic signatures*  
Tobias M. Muller, Gracjan Lambert, and Boris Gurevich, Curtin U

## LABORATORY ACOUSTIC MEASUREMENTS

- 1888 RP 2.1 (1501-1504)**  
*Velocities of deep water reservoir sands*  
De-hua Han, U of Houston; Michael Batzle, Colorado School of Mines
- 1893 RP 2.2 (1505-1508)**  
*Modeling of acoustic properties in carbonate rocks*  
Øystein H. Rossebø\*, Ivar Brevik, and Gholam Reza Ahmadi, Statoil; Ludmila Adam, Colorado School of Mines
- 1898 RP 2.3 (1509-1512)**  
*Observations of velocity and resistivity changes during freeze-thaw cycles in Berea sandstone*  
Carl H. Sondergeld\* and Chandra S. Rai, Mewbourne School of Petroleum and Geological Engineering, U of Oklahoma
- 1903 RP 2.4 (1513-1516)**  
*Measurement of shear wave velocity of heavy oil*  
De-hua Han and Jiajin Liu, U of Houston; Michael Batzle, Colorado School of Mines
- 1908 RP 2.5 (1517-1520)**  
*Pore pressure effect on mechanical and acoustic properties in shale and sand*  
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- 1913 RP 2.6 (1521-1524)**  
*Gassmann's fluid substitution paradox on carbonates: seismic and ultrasonic frequencies*  
Ludmila Adam and Michael Batzle, Colorado School of Mines; Ivar Brevik, Statoil R&D
- 1919 RP 2.7 (1525-1528)**  
*Values of mineral modulus of clay*  
M. Prasad, R. Hofmann, and M. Batzle, Colorado School of Mines; M. Kopycinska-Muller, U. Rabe, and W. Arnold, Fraunhofer Inst for Nondestructive Testing, IZFP, Saarbrücken
- 1924 RP 2.8 (1529-1532)**  
*Reactive flow in a fracture: scale effects in the interpretation of seismic measurements.*  
Angel A. Acosta-Colon\*, David D. Nolte, and Laura J. Pyrak-Nolte, Purdue U

## CALIBRATION STUDIES

- 1929 RP 3.1 (1533-1536)**  
*Modelling of seismic properties during diagenesis in fluvial depositional environments*  
Anders Draege, U of Bergen, Norway

- 1935 RP 3.2 (1537-1541)**  
*A rock physics study-Understanding amplitudes of the Upper Cretaceous sands in Brazil*  
Elizabeth Diaz, Occidental Oil and Gas Corp
- 1941 RP 3.3 (1542-1545)**  
*Estimation of gas-hydrate saturation using multicomponent seismic data*  
Dhananjay Kumar, Mrinal K. Sen, and Nathan L. Bangs, U of Texas-Austin
- 1947 RP 3.4 (1546-1549)**  
*Automatic invasion correction of elastic logs or “let the tools speak by themselves”*  
Guilherme Vasquez, Lucia Dillon, Carlos Varela, Júlio Justen, Guenther Neto, Cassiane Nunes, and Cleide Bacelar, Petrobras
- 1952 RP 3.5 (1550-1553)**  
*Cumulative seismic attribute for oh determination*  
Jack Dvorkin\*, Stanford U and Rock Solid Images
- 1957 RP 3.6 (1554-1556)**  
*Gardner revisited: A temperature correction for the estimation of density from compressional velocity in GOM shales*  
Reginald H. Beardsley, Exploration Software Consultants
- 1961 RP 3.7 (1557-1560)**  
*Burial processes and their control on acoustic properties in shales.*  
Ivar Brevik\*, Statoil R&D Centre
- 1966 RP 3.8 (1561-1564)**  
*Seismic velocity, Q, geological structure and lithology estimation at a ground water contamination site*  
Fuchun Gao\*, Gian-luigi Fradelizio, and Alan Levander, Rice U; Gerhard Pratt, Queen’s U; Colin Zelt, Rice U

## ATTENUATION MEASUREMENTS AND STRESS SENSITIVITY

- 1971 RP 4.1 (1565-1568)**  
*Seismic attenuation: Observations and mechanisms*  
Michael Batzle, Ronny Hofmann, and Manika Prasad, Colorado School of Mines; Gautam Kumar, BG Group; L. Duranti, ChevronTexaco; De-hua Han, U of Houston
- 1976 RP 4.2 (1569-1572)**  
*Differential acoustic resonance spectroscopy: An experimental method for estimating acoustic attenuation in porous media*  
Jerry M. Harris\*, Youli Quan, and Chuntang Xu, Stanford U
- 1981 RP 4.3 (1573-1576)**  
*Seismic-frequency attenuation and moduli estimates using a fiber-optic strainmeter*  
Ludmila Adam\*, John Scales, and Michael Batzle, Colorado School of Mines; Tim Niebauer, Micro-G Solutions

- 1986 RP 4.4 (1577-1580)**  
*Dispersive and attenuative nature of shales: multiscale and multifrequency observations*  
 Luca Duranti\* and Russ Ewy, ChevronTexaco Energy Technology Company;  
 Ronny Hofmann, Colorado School of Mines
- 1991 RP 4.5 (1581-1584)**  
*Emersion of seismic anisotropy and nonlinear effects in liquid saturated friable media under weak DC field.*  
 M. Y. Podberezhiy\*, Y. A. Nefedkin, V. A. Kulikov, E. B. Sibiryakov; Inst of Geophysics SB RAS
- 1996 RP 4.6 (1585-1588)**  
*A rock physics and attenuation analysis of a well from the Gulf of Mexico*  
 Gary Mavko, Stanford U; Jack Dvorkin\*, Stanford U and Rock Solid Images;  
 Joel Walls, Rock Solid Images
- 2001 RP 4.7 (1589-1592)**  
*Velocity dispersion in layered media*  
 Carlos Cobos\*, U of Houston and Fusion Petroleum Technology Inc; De-hua Han, U of Houston
- 2006 RP 4.8 (1593-1596)**  
*Stress sensitivity of wave velocities in shale*  
 Rune M. Holt\*, NTNU and Sintef Petroleum Research; Audun Bakk, Erling Fjær, and Jørn F. Stenebråten, Sintef Petroleum Research

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- 2012 RP P1.1 (1597-1600)**  
*The T-matrix approach for carbonate rocks*  
 R. Agersborg\*, T. A. Johnsen, and M. Jakobsen, U of Bergen
- N/A RP P1.2 (Withdrawn)**  
*Strain solitons in a kind of solid medium and the influence caused by their interactions on solid medium*  
 Naranmandula\*, Ma Jun, and Wang KeXie, College of Physics, Jilin U
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 Boris Gurevich\*, Curtin U of Technology; Erik H. Saenger, Freie U; Radim Ciz, CSIRO Petroleum
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 J. Sothcott\* and A. I. Best, Challenger Division for Seafloor Processes, Nat'l Oceanography Centre; J. Khazanehdari, Reservoir Services, WesternGeco
- 2027 RP P1.5 (1609-1612)**  
*Fluid substitution without S-wave velocity information in hydrocarbon saturated reservoirs*  
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 Oleg Portniaguine\*, Fusion Petroleum Technologies; John Castagna, U of Houston
- 2068 SI 1.4 (1642-1645)**  
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**2123 SI 2.7 (1685-1688)**  
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Meigen Zhang\* and Xiaofan Li, State Key Laboratory of Lithosphere Tectonic Evolution, Chinese Academy of Sciences
- 2269 SM P1.6 (1799-1802)**  
*Seismic wave propagation in 3D randomly-heterogeneous elastic media*  
Kyoung-Tae Kim\*, David F. Aldridge, and Neill P. Symons, Sandia Nat'l Lab
- 2274 SM P1.7 (1803-1805)**  
*On multi-scale seismic amplitude forward modeling and thin-layer anisotropy*  
A. Dey\* and A. Gisolf, Delft U of Technology
- 2278 SM P1.8 (1806-1809)**  
*Transparent boundary condition for 1-D diffusion equation*  
Arvind K. Sharma\* and Matthias G. Imhof, Virginia Tech

## MISCELLANEOUS

- 2283 SPMI 1.1 (1810-1813)**  
*Simulated 2D/3D PSDM images with a fast, robust, and flexible FFT-based filtering approach*  
Isabelle Lecomte\*, Ludovic Pochon-Guerin, NORSAR
- 2288 SPMI 1.2 (1814-1817)**  
*Regularized least-squares inversion for 3-D subsalt imaging*  
Marie L. Clapp\*, Robert G. Clapp, and Biondo L. Biondi, Stanford U
- 2293 SPMI 1.3 (1818-1821)**  
*3D PSDW prestack depth migration*  
Anning Hou\*, GeoCenter; Kurt Marfurt, U of Houston
- 2299 SPMI 1.4 (1822-1825)**  
*Gaussian packet pre-stack depth migration of the Marmousi data set*  
Karel Zacek\*, Charles U
- 2304 SPMI 1.5 (1826-1829)**  
*Coupled space-domain elastic migration in heterogeneous media*  
A. Homayoun Heidari and Murthy N. Guddati, North Carolina State U
- 2309 SPMI 1.6 (1830-1833)**  
*Velocity-independent determination of 3D focusing operators using cross-spreads*  
Mustafa Al-Ali\*, Delft U of Technology; Gerrit Blacquièrre, TNO Science and Industry
- 2314 SPMI 1.7 (1834-1837)**  
*Improving vertical and lateral resolution by stretch-free, horizon-oriented imaging*  
Gabriel Perez\* and Kurt Marfurt, AGL, U of Houston
- 2319 SPMI 1.8 (1838-1841)**  
*Model based processing (III): pseudo-space reverse time migration*  
Xiutian Wang\*, Dongming Xia, Jinshan Li, Qingbing Tang, and Xiuping Jiang, Ocean U of China

## WAVE EQUATION

- 2324 SPMI 2.1 (1842-1845)**  
*Wave-equation migration from topography*  
Jeff Shragge and Paul Sava, Stanford U
- 2329 SPMI 2.2 (1846-1849)**  
*Optimizing explicit depth migration with a stabilizing Wiener filter and spatial resampling*  
Gary F. Margrave\*, Hugh D. Geiger, Saleh M. Al-Saleh, and Michael P. Lamoureux, U of Calgary
- 2334 SPMI 2.3 (1850-1853)**  
*Time-shift imaging condition*  
Paul Sava and Sergey Fomel, Bureau of Economic Geology, U of Texas-Austin

- 2339 SPMI 2.4 (1854-1857)**  
*3D common-shot depth imaging with an optimized Fourier finite-difference scheme*  
Lianjie Huang\* and Michael Fehler, Los Alamos Nat'l Lab; Zhiming Li, Parallel Data Systems, Inc; Philip Schultz, Unocal Deepwater USA
- 2344 SPMI 2.5 (1858-1861)**  
*Globally optimized Fourier finite-difference migration in the offset domain*  
Hongchuan Sun\*, Lianjie Huang, and Michael C. Fehler, Los Alamos Nat'l Lab
- 2349 SPMI 2.6 (1862-1865)**  
*Seismic resolution and illumination: A wave-equation-based analysis*  
Xiao-Bi Xie\* and Ru-Shan Wu, IGPP, U of California-Santa Cruz; Michael Fehler and Lianjie Huang, Los Alamos Nat'l Lab
- 2355 SPMI 2.7 (1866-1869)**  
*Kinematics of prestack shot-geophone migration*  
Christiaan C. Stolk\*, U of Twente; Maarten V. de Hoop, Colorado School of Mines; William W. Symes, Rice U
- 2360 SPMI 2.8 (1870-1873)**  
*Seismic image resolution: numerical investigation of role of migration imaging operator*  
Michael Fehler\* and Lianjie Huang, Los Alamos Nat'l Lab; Ru-Shan Wu and Xiao-Bi Xie, U of California-Santa Cruz

## **KIRCHHOFF**

- 2365 SPMI 3.1 (1874-1877)**  
*Amplitude preserving Kirchhoff pre-stack time migration for time lapse processing on Troll West*  
David Bannister\*, Momtchil Roussanov, and Charles Jones, Geotrace Technologies
- 2370 SPMI 3.2 (1878-1881)**  
*The computation of gridded traveltimes when assuming circular wavefronts*  
John C. Bancroft, Crewes, U of Calgary
- 2375 SPMI 3.3 (1882-1885)**  
*Kirchhoff PreSDM interactive dip-gather stacking and dip illumination panel generation*  
Fuhao Qin\*, Bin Wang, Po Zhang, and F. Audebert, CGG Americas
- 2380 SPMI 3.4 (1886-1889)**  
*Practical aspects of Voronoi-based area weights for Kirchhoff migration*  
Herman Jaramillo, GeoCenter
- 2385 SPMI 3.5 (1890-1893)**  
*Data driven automatic aperture optimization for Kirchhoff migration*  
Amir Kabbej\*, Total; Reda Baina, OPERA; Bertrand Duquet, IFP

- 2390 SPMI 3.6 (1894-1897)**  
*Event-consistent smoothing and automated picking in CRS-based seismic imaging*  
 Tilman Klüver\* and Jürgen Mann, Geophysical Inst, U of Karlsruhe
- 2395 SPMI 3.7 (1898-1901)**  
*Full azimuth from narrow azimuth via AMO*  
 J. Bee Bednar, Panorama Technologies
- 2400 SPMI 3.8 (1902-1905)**  
*Prestack Kirchhoff time migration on high performance reconfigurable computing platform*  
 Chuan He, Chuanwen Sun, Mi Lu, and Wei Zhao, Texas A&M U

## ANISOTROPIC

- 2405 SPMI 4.1 (1906-1909)**  
*Imaging steeply dipping reflectors in TI media by wavefield extrapolation*  
 Guojian Shan\* and Biondo Biondi, Stanford U
- 2411 SPMI 4.2 (1910-1913)**  
*Phase-shift anisotropic depth migration using controlled illumination applied to a model of the San Alberto field, Bolivia*  
 Marco Antonio Cetale Santos\*, DEE/PUC - Rio; Djalma Manoel Soares Filho, Petrobras; Paulo Leo Manassi Osorio and Felipe Prado Loureiro, DEE/PUC - Rio
- 2416 SPMI 4.3 (1914-1917)**  
*3D fourier finite-difference anisotropic depth migration*  
 Linbin Zhang, Lawrence Berkeley Nat'l Lab; Biaolong Hua\* and Henri Calandra, Total E & P
- 2422 SPMI 4.4 (1918-1921)**  
*Wave equation prestack depth migration in laterally varying VTI media*  
 Jiaxiang Ren\*, Clive Gerrard, James McClean, and Mikhail Orlovich, PGS Marine Geophysical
- 2427 SPMI 4.5 (1922-1925)**  
*Angle-domain common image gathers for anisotropic migration*  
 Biondo Biondi, Stanford U
- 2432 SPMI 4.6 (1926-1929)**  
*Vector imaging of converted wave data in laterally uniform media with VTI anisotropy*  
 Charlie Jing\*, Thomas A. Dickens, and Graham A. Winbow, ExxonMobil Upstream Research Company
- 2437 SPMI 4.7 (1930-1933)**  
*Reverse-time migration for tilted TI media*  
 Xiang Du, John C. Bancroft, and Larry R. Lines, Crewes, U of Calgary
- 2442 SPMI 4.8 (1934-1937)**  
*Common azimuth migration for elliptical and VTI media*  
 Satyakee Sen\* and Biondo Biondi, Stanford U



## AMPLITUDES AND BEAMLETS

- 2447 SPMI 5.1 (1938-1941)**  
*High-resolution wave equation AVP imaging with sparseness constraints*  
Juefu Wang\* and Mauricio D. Sacchi, U of Alberta
- 2452 SPMI 5.2 (1942-1945)**  
*True amplitude migration by wavefield continuation*  
Frederic Joncour, J. Svay-Lucas, and B. Duquet, Inst Francais du Petrole; G. Lambar, Ecole Nat'l Superieure des Mines de Paris
- 2457 SPMI 5.3 (1946-1949)**  
*Influence of propagator and acquisition aperture on image amplitude*  
Jun Cao\* and Ru-shan Wu, Modeling and Imaging Lab, Inst of Geophysics and Planetary Physics, U of California-Santa Cruz
- 2462 SPMI 5.4 (1950-1953)**  
*Insight into the output of reverse-time migration: what do the amplitudes mean?*  
Matthew M. Haney\*, Lewis C. Bartel, David F. Aldridge, and Neill P. Symons, GSandia Nat'l Lab
- 2467 SPMI 5.5 (1954-1957)**  
*True amplitude multi-one-way migration: comparison of different imaging principles*  
Denis A. Kiyashchenko\*, St-Petersburg State U; Rene-Edouard Plessix, Shell Int'l E&P
- 2472 SPMI 5.6 (1958-1961)**  
*Application of beamlet migration to the SmaartJV Sigsbee2A model*  
Yongzhong Wang\*, Richard W. Verm, and J. Bee Bednar; Geophysical Development Corp
- 2478 SPMI 5.7 (1962-1965)**  
*Application of beamlet propagator to migration amplitude correction*  
Shengwen Jin, Screen Imaging Technology; Mingqiu Luo, Screen Imaging Technology and Inst of Geophysics and Planetary Physics, U of California-Santa Cruz; Ru-Shan Wu, Inst of Geophysics and Planetary Physics, U of California-Santa Cruz; David Walraven, Anadarko Petroleum Corp
- 2483 SPMI 5.8 (1966-1969)**  
*True amplitude one-way propagators implemented with localized corrections on beamlets*  
Mingqiu Luo, Ru-Shan Wu, and Xiao-Bi Xie, Modeling and Imaging Lab, Inst of Geophysics and Planetary Physics, U of California-Santa Cruz

## PRACTICAL

- 2488 SPMI 6.1 (1970-1973)**  
*Velocity smoothing before depth migration: Does it help or hurt?*  
Carlos Pacheco and Ken Larner, Colorado School of Mines
- 2493 SPMI 6.2 (1974-1977)**  
*Finding the edge of salt via a dual-velocity flood*  
John E. Anderson, ExxonMobil Upstream Research Company; Carey M. Marcinkovich, ExxonMobil Exploration Company

- 2498 SPMI 6.3 (1978-1980)**  
*Automatic sub-salt velocity analysis: an integrated strategy of raybased tomography and wave-equation migration velocity inversion*  
Peng Shen\*, Elive Menyoli, and Henri Calandra, Total E&P USA
- 2502 SPMI 6.4 (1981-1984)**  
*Pre-SDM image optimization for fast prospectivity analysis*  
Laurent Lemaistre\*, Anne Sophie Cyteval, and Paul Sexton, Total; Bertrand Duquet, IFP
- 2507 SPMI 6.5 (1985-1988)**  
*How many angles do we really need for delayed-shot migration?*  
John T. Etgen\*, BP EPTG
- 2512 SPMI 6.6 (1989-1992)**  
*Wave equation migration and illumination on a 3-D GOM deep water dataset*  
Brigida Fontecha, Wenyin Cai, Francisco Ortigosa, and Qingbo Liao, Repsol YPF; Shengwen Jin and Shiyong Xu, Screen Imaging Technology, Inc
- 2517 SPMI 6.7 (1993-1996)**  
*Benefits of low frequencies for subsalt imaging*  
Jerry Kapoor\*, Christof Stork, and Mark Egan, WesternGeco
- 2522 SPMI 6.8 (1997-2000)**  
*Can we image beneath salt body?-Target-oriented visibility analysis*  
Shiyong Xu\* and Shengwen Jin, Screen Imaging Technology, Inc

## MIGRATION

- 2527 SPMI P1.1 (2001-2004)**  
*True-amplitude migration weights for converted waves*  
Alexander Goertz\*, Paulsson Geophysical Services; Matthias Riede, Sintef Petroleum Research
- 2532 SPMI P1.2 (2005-2008)**  
*The FOCI method versus the WLSQ and Hale's wavefield extrapolation methods*  
Saleh M. Al-Saleh\*, Gary F. Margrave, and Hugh D. Geiger, U of Calgary
- 2537 SPMI P1.3 (2009-2012)**  
*On common-offset prestack time migration with curvelets*  
Huub Douma\* and Maarten V. de Hoop, Colorado School of Mines
- 2542 SPMI P1.4 (2013-2016)**  
*Fourier-domain imaging condition for shot-profile migration*  
Brad Artman\*, Stanford U; Sergey Fomel, U of Texas-Austin
- 2547 SPMI P1.5 (2017-2020)**  
*Common reflection angle volumes for subsalt seismic imaging*  
Graham Winbow\*, Ted Clee, and Mike Rainwater, ExxonMobil Upstream Research

**2552 SPMI P1.6 (2021-2024)**  
*Common image gathers in the plane-wave domain: A prestack Gaussian beam migration algorithm*  
Qiyu Han\*, Ru-Shan Wu, MILab, IGPP, U of California-Santa Cruz

**2557 SPMI P1.7 (2025-2028)**  
*Migration of duplex waves*  
Naum Marmalyevskyy, Yury Roganov, and Zinovy Gorniyak, Ukrainian State Geological Prospecting Inst; Alex Kostyukevych\*, Tesseral Technologies; Viktor Mershchiy, Nadra Group

**2562 SPMI P1.8 (2029-2032)**  
*Salt flank delineation by PS interferometric imaging*  
Xiang Xiao, Min Zhou, and Gerard T. Schuster, U of Utah

## MIGRATION

**2567 SPMI P2.1 (2033-2036)**  
*Azimuth Moveout—a promising application for pre-stack data*  
Satinder Chopra\*, Arcis Corp

**2572 SPMI P2.2 (2037-2040)**  
*The design of wavefield extrapolators using projections onto convex sets*  
W. A. Mousa\*, D. C. McLernon, S. Boussakta, School of Electronic & Electrical Engineering; M. Van der Baan, School of Earth and Environment, U of Leeds

**2577 SPMI P2.3 (2041-2044)**  
*Migration weights for prestack converted wave data to reduce the acquisition footprint*  
Shu-Schung Lee\*, John Willis, and Sonny Lin, PGS

**2582 SPMI P2.4 (2045-2048)**  
*DSR wave-equation migration for steep and overturned events*  
Sean Crawley and Dimitri Bevc, 3DGeo Development Inc

**2587 SPMI P2.5 (2049-2051)**  
*Suppressing artifacts in prestack reverse time migration*  
Robin F. Fletcher, Paul Fowler, and Phil Kitchenside, WesternGeco; Uwe Albertin, BP

**2591 SPMI P2.6 (2052-2055)**  
*Coordinate-independent angle-gathers for wave equation migration*  
Paul Sava and Sergey Fomel, U of Texas-Austin

**2597 SPMI P2.7 (2056-2059)**  
*Automatic selection of reference velocities for recursive depth migration by peak search method*  
Hugh D. Geiger\* and Gary F. Margrave, U of Calgary

**2602 SPMI P2.8 (2060-2063)**  
*Comparison of different schemes of image amplitude correction in prestack depth migration*  
Ru-Shan Wu and Mingqiu Luo, Modeling and Imaging Lab, IGPP, U of California- Santa Cruz

## SURFACE AND DIFFRACTED MULTIPLE ATTENUATION

- 2607 SPMUL 1.1 (2064-2067)**  
*Fast 3D surface-related multiple elimination using azimuth moveout for multiples*  
Ken H. Matson and Ray Abma, BP America
- 2612 SPMUL 1.2 (2068-2071)**  
*Kinematics of water-bottom and diffracted 2D multiples in data space and image space*  
Gabriel Alvarez\*, Stanford U
- 2617 SPMUL 1.3 (2072-2075)**  
*Diffracted multiple attenuation using wavelet filter in the focused domain*  
Zhou Yu, Nurul Kabir, and Ken Matson, E & P Technology
- 2623 SPMUL 1.4 (2076-2079)**  
*Application of 3-D SRME and multiple diffraction removal in the Makassar Straits, Indonesia*  
Rob Hegge\*, Peter Aaron, Roald van Borselen, John Brittan, and Ed Ferris, PGS Marine Geophysical, Chris Davin, Unocal Indonesia Company
- 2628 SPMUL 1.5 (2080-2083)**  
*3D surface-related multiple modeling, principles and results*  
A. Pica, G. Poulain, and B. David, CGG France; M. Magesan and S. Baldock, CGG Americas; T. Weisser, CGG Norge; P. Hugonnet and Ph. Herrmann, CGG France
- 2633 SPMUL 1.6 (2084-2087)**  
*Multiple investigations by synthetic modeling and wave equation attenuation: North West Shelf of Australia data example*  
Ping Zhao\*, Andrew Long, Roald van Borselen, and Jim Myron, PGS Marine Geophysical
- 2638 SPMUL 1.7 (2088-2091)**  
*3D SRME prediction and subtraction practice for better imaging*  
Dechun Lin, Jerry Young, Wen-jack Lin, Malcolm Griffiths, and Monica Hartmann, Veritas DGC, Inc
- 2643 SPMUL 1.8 (2092-2094)**  
*Targeted deconvolution for optimal multiple attenuation*  
Steve Lancaster, BP Exploration

## NEW DEVELOPMENTS IN MULTIPLE ATTENUATION

- 2647 SPMUL 2.1 (2095-2098)**  
*Extinction theorem deghosting method using towed streamer pressure data: Analysis of the receiver array effect on deghosting and subsequent free surface multiple removal*  
Jingfeng Zhang\* and Arthur B. Weglein, U of Houston

- 2653 SPMUL 2.2 (2099-2102)**  
*Inverse data processing, a paradigm shift?*  
A. J. Berkhout\* and D. J. Verschuur, Delft U of Technology
- 2658 SPMUL 2.3 (2103-2106)**  
*Transforming multiples into primaries: experience with field data*  
D. J. Verschuur\* and A. J. Berkhout, Delft U of Technology
- 2664 SPMUL 2.4 (2107-2110)**  
*Prestack depth migration of primary and surface-related multiple reflections*  
Remco Muijs\* and Klaus Holliger, ETH Zurich; Johan O. A. Robertsson, WesternGeco
- 2674 SPMUL 2.5 (2111-2114)**  
*Estimating imaging artifacts caused by internal multiples*  
Alison E. Malcolm\* and Maarten V. de Hoop, Colorado School of Mines; Henri Calandra, Total
- 2676 SPMUL 2.6 (2115-2118)**  
*An inverse scattering internal multiple elimination method: Beyond attenuation, a new algorithm and initial tests*  
Adriana Citlali Ramírez\* and Arthur B. Weglein, U of Houston
- 2679 SPMUL 2.7 (2119-2122)**  
*Multiple elimination by reverse-time datuming and primary-only imaging condition*  
Min Zhou\*, U of Utah; Yi Luo, Saudi-Aramco
- 2684 SPMUL 2.8 (2123-2126)**  
*OBC multiple suppression with the Texas two-step*  
Max Deffenbaugh and Ramesh Neelamani, ExxonMobil Upstream Research Company

## **MULTIPLE ATTENUATION**

- 2689 SPMUL P1.4 (2127-2129)**  
*Analytical traveltimes for arbitrary multiples in constant velocity*  
Chris Liner, U of Tulsa; Ioan Vlad\*, Stanford U
- 2693 SPMUL P1.5 (2130-2133)**  
*Minimizing the cost of 3D SRME: a field data example*  
Anatoly Baumstein and David L. Hinkley, ExxonMobil Upstream Research Company
- 2698 SPMUL P1.6 (2134-2137)**  
*Linear demultiple solution based on the concept of bottom multiple generator (BMG) approximation*  
Abiola O. Watts\* and Luc T. Ikelle, CASP project, Texas A&M U

## NOISE ATTENUATION AND DATA INTERPOLATION

- 2703 SPNA 1.1 (2138-2141)**  
*Diffraction noise attenuation in shallow water 3D marine surveys*  
Necati Gulunay\*, Mag Magesan, and Jeff Connor, CGG Americas
- 2708 SPNA 1.2 (2142-2145)**  
*Coherent noise velocity analysis by phase-matching plus p-omega domain wave field transformation and its application in ground roll attenuation*  
Houzhong (James) Zhang, Don Pham, and Mike Thornton, Veritas DGC
- 2713 SPNA 1.3 (2146-2149)**  
*Innovative filtering techniques applied to depth-phase detection in nuclear monitoring data and ghost reflection suppression in exploration seismic data*  
Delaine Reiter\*, Jessie Bonner, and Anastasia Stroujkova, Weston Geophysical Corp; Sven Treitel, TriDekon
- 2718 SPNA 1.4 (2150-2153)**  
*3D interpolation of irregular data with a POCS algorithm*  
Ray Abma\* and Nurul Kabir, BP Americas
- 2723 SPNA 1.5 (2154-2157)**  
*Reconstruction of sparsely sampled data using a high-resolution version of the focal transform*  
D. J. Verschuur\* and A. J. Berkhout, Delft U of Technology
- 2728 SPNA 1.6 (2158-2161)**  
*Understanding land data interpolation*  
Daniel Trad\*, Jeff Deere, and Scott Cheadle, Veritas DGC
- 2733 SPNA 1.7 (2162-2165)**  
*Sparseness-constrained data continuation with frames: Applications to missing traces and aliased signals in 2/3-D*  
Gilles Hennenfent and Felix Herrmann, U of British Columbia
- 2738 SPNA 1.8 (2166-2169)**  
*QC of a marine seismic trace reconstruction technique*  
Luis Andrade, Total; German Hoecht and Evgeny Landa, OPERA; Simon Spitz\*, CGG

## GENERAL

- 2743 SPNA 2.1 (2170-2172)**  
*A filter bank solution to absorption simulation and compensation*  
Ralf Ferber, WesternGeco
- 2747 SPNA 2.2 (2173-2176)**  
*Phase correction in Gabor deconvolution*  
Carlos A. Montana\* and Gary F. Margrave, Crewes, U of Calgary

- 2752 SPNA 2.3 (2177-2180)**  
*Source and receiver amplitude equalization using reciprocity—Application to land seismic data*  
Robbert van Vossen\* and Jeannot Trampert, Utrecht U; Andrew Curtis, Schlumberger, Cambridge Research and U of Edinburgh; Andreas Laake, WesternGeco
- 2757 SPNA 2.4 (2181-2184)**  
*Applications of adapted waveform analysis for spectral feature extraction and denoising*  
Lionel J. Woog, Igor Popovic\*, and Anthony Vassiliou, GeoEnergy
- 2762 SPNA 2.5 (2185-2188)**  
*Compression of seismic data using ridgelets*  
Sergio E. Zarantonello\*, 3DGeo Development, Inc and Santa Clara U; Dimitri Bevc, 3DGeo Development, Inc
- 2767 SPNA 2.6 (2189-2192)**  
*Using multigrid for surface consistent statics*  
John Millar and J. C. Bancroft, Crewes
- 2772 SPNA 2.7 (2193-2196)**  
*Stacking velocities in the presence of shallow anomalies: Critique, analysis, and improvement of understanding*  
E. Blas\*, Revolution Geoservices Inc
- 2777 SPNA 2.8 (2197-2200)**  
*A comparison of the WED using a single shot gather and the static corrections*  
Benxi Ke\* and Bo Zhao, BGP, CNPC
- 2782 SPNA 2.9 (2201-2204)**  
*Processing orthogonal geometry—what is missing?*  
Gijs J. O. Vermeer\*, 3DSymSam, Geophysical Advice, Oldemarkt

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- 2787 SPNA P1.1 (2205-2208)**  
*Background noise identification and attenuation using point receiver seismic data*  
Yanpeng Li\* and Donglei Tang, BGP, CNPC
- 2792 SPNA P1.2 (2209-2212)**  
*Surface wave attenuation in foothills areas: two innovative approaches*  
Laurent Duval, Martine Ancel, Marc Becquey, and Karine Broto\*, IFP
- 2797 SPNA P1.3 (2213-2216)**  
*An intermediate reference datum static correction technique and applications*  
Rongjun Qian\*, Zeyuan Feng, Peiming Li, and Xiaoling Yang, BGP, CNPC
- 2802 SPNA P1.4 (2217-2220)**  
*Application case: 3-D static correction in complex mountains of Tarim Basin*  
Haifeng Shi\*, Xichang Hou, Feng Yan, and Zhenhua Li, BGP, CNPC

- 2807 SPNA P1.5 (2221-2224)**  
*Importance of precision static corrections in seismic data acquisition in complex geological areas*  
A. K. Srivastav\* and G. Sarvesam, Oil & Natural Gas Corp, India
- 2812 SPNA P1.6 (2225-2228)**  
*Evolution of a near-surface model in an area of complex topography*  
Ralph Bridle, Robert Ley, Ameera Al-Mustafa, and Mike Pittman, Saudi Aramco
- 2817 SPNA P1.7 (2229-2232)**  
*Tomostatics and closure phase residual statics applied to Saudi Aramco land data*  
Jianming Sheng, U of Utah; Jianhua Yu, BP; Gerard T. Schuster, U of Utah
- 2822 SPNA P1.8 (2233-2236)**  
*3D CRS processing: a better use of pre-stack data*  
D. Borrini, Eni E&P Div; A. Cristini, CRS4 - Parco Scientifico e Tecnologico Polaris; P. Follino, P. Marchetti\*, and E. Zamboni, Eni E&P Div



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*Velocity analysis from interferometric data*  
Eric A. Dussaud\* and William W. Symes, Rice U
- 2832 SPVA 1.2 (2241-2244)**  
*New quality metric for validation of velocity models*  
Frode Ljones\*, Michael Nickel, Hilde G. Borgos, and Lars Sonneland, Schlumberger Stavanger Research; Rolf Mjelde, U of Bergen
- 2837 SPVA 1.3 (2245-2248)**  
*Influence of structural dip on interval velocity analysis*  
Moshe Reshef\*, Tel-Aviv U and Landmark Graphics; Andreas Ruger, Landmark Graphics
- 2842 SPVA 1.4 (2249-2252)**  
*Differential semblance velocity analysis via shot profile migration*  
Peng Shen\*, Total E&P USA; William W. Symes, Rice U; Scott Morton, Amerada Hess, and Henri Calandra, Total E&P USA
- 2847 SPVA 1.5 (2253-2256)**  
*Building interval velocity model by multiple Kirchhoff pre-stack depth migrations*  
Changchun Yang, Chuanwen Sun\*, Wenqing Liu, and Yiqing Ren, Inst of Geology and Geophysics, Chinese Academy of Science
- 2852 SPVA 1.6 (2257-2260)**  
*A fast and low cost alternative to subsalt wave equation migration perturbation scans*  
Bin Wang, Fuhao Qin, Francois Audebert, and Volker Dirks, CGG Americas
- 2857 SPVA 1.7 (2261-2264)**  
*Model based processing (IV): migration velocity analysis*  
Xiutian Wang\*, Dongming Xia, Jinshan Li, Xiuping Jiang, and Qingbing Tang, Ocean U of China
- 2862 SPVA 1.8 (2265-2268)**  
*Fast interval velocity estimation via NMO-based differential semblance*  
Jintan Li\* and William W. Symes, Rice U

## VELOCITY ANALYSIS

- 2867 SPVA P1.1 (2269-2272)**  
*Velocity-independent time-domain seismic imaging using local event slopes*  
Sergey Fomel\*, Bureau of Economic Geology, U of Texas-Austin
- 2873 SPVA P1.2 (2273-2276)**  
*A new travel time estimation method for horizontal strata*  
M. Turhan Taner\*, Rock Solid Images; Sven Treitel, TriDekon; M. Al-Chalabi, Petrotech Consultancy
- 2878 SPVA P1.3 (2277-2280)**  
*Enhanced resolution in Radon domain using the shifted hyperbola equation*  
Cristina Moldoveanu-Constantinescu\* and Mauricio D. Sacchi, U of Alberta
- 2883 SPVA P1.4 (2281-2284)**  
*Determination of migration velocities by stackpower optimization*  
J. Schneider\*, Bureau of Applied Geophysics, Nordstemmen, Germany
- 2888 SPVA P1.5 (2285-2288)**  
*A new, fast, easy, and accurate method for velocity analysis: methodology and preliminary results*  
M. B. C. Silva\*, Group of Technology and Petroleum Engineering, GTEP; C. Rodriguez-Suarez, Petrobras; S. A. B Fontoura, Group of Technology and Petroleum Engineering, GTEP
- 2893 SPVA P1.6 (2289-2292)**  
*Constrained velocity inversion*  
Zvi Koren and Igor Ravve, Paradigm Geophysical
- 2898 SPVA P1.7 (2293-2296)**  
*Application of horizon-based interval velocity semblance to velocity analysis*  
Genmeng Chen\*, Xuejun Wang, Don Duyka, and Gary Fair, BGP Americas

## SELECTED BEST PAPERS IN CASE HISTORIES

- 2903 SS 1.1 (2297-2299)**  
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