

Center for Wave Phenomena Thesis and Dissertation List

Updated January 2010

ABSTRACT

This is a listing of CWP theses and dissertations compiled using the file CWP_thesis.bib.

CWP-640 (Xuan, 2009)
CWP-639 (Behura, 2009)
CWP-618 (Melo, 2008)
CWP-617 (Fuck, 2008)
CWP-614 (Mathewson, 2008)
CWP-581 (Vasconcelos, 2007)
CWP-580 (Mehta, 2007)
CWP-560 (Xu, 2006)
CWP-551 (Zhu, 2006)
CWP-549 (Douma, 2006)
CWP-517 (Malcolm, 2005)
CWP-495 (Dewangan, 2004)
CWP-494 (Haney, 2004)
CWP-492 (Grêt, 2004)
CWP-489 (Pacheco, 2004)
CWP-470 (Cheng, 2004)
CWP-464 (Sarkar, 2003)
CWP-462 (Mateeva, 2003)
CWP-461 (Van Wijk, 2003)
CWP-442 (Pech, 2003)
CWP-434 (Cardona, 2002)
CWP-400 (Jilek, 2002)
CWP-395 (LeRousseau, 2001)
CWP-394 (Brandsberg-Dahl, 2001)
CWP-358 (Baoniu, 2001)
CWP-357 (Wang, 2000)
CWP-356 (Robinson, 2000)
CWP-326 (Sheaffer, 1999)
CWP-296 (Meng, 1999)
CWP-290 (Villarreal, 1999)
CWP-284 (Jaramillo, 1998)
CWP-240 (Perez, 1997)
CWP-239 (Deng, 1997)
CWP-237 (Salinas, 1996)
CWP-236 (Alkhalifah, 1996)
CWP-235 (Rüger, 1996)
CWP-234 (Al-Dajani, 1996)
CWP-233 (Gouveia, 1996)
CWP-228 (Xu, 1996)
CWP-227 (De Moraes, 1996)
CWP-204 (Murillo, 1996)
CWP-201 (Anderson, 1996)
CWP-196 (Cheng, 1995)
CWP-195 (Alvarez, 1995)
CWP-186 (Tjan, 1995)
CWP-168 (Liu, 1995)
CWP-163 (Uzcategui, 1994)
CWP-161 (Fei, 1994)
CWP-139 (Rüger, 1993)
CWP-138 (Alkhalifah, 1993)
CWP-132 (Alfaraj, 1993)
CWP-117 (Anno, 1992)
CWP-116 (Fazzari, 1992)
CWP-114 (Deng, 1992)
CWP-110 (Hedley, 1991)
CWP-106 (Aldolaijan, 1991)
CWP-100 (Mikulich, 1992)
CWP-091 (Boden, 1989)
CWP-084 (Dong, 1989)
CWP-083 (Emanuel, 1989)
CWP-082 (Geoltrain, 1989)
CWP-075 (Sumner, 1988)
CWP-059 (Zuver, 1987)
CWP-054 (Sullivan, 1987)
CWP-052 (Jordan, 1987)
CWP-051 (Docherty, 1987)
CWP-047 (Kaczkowski, 1986)
CWP-045 (Quist, 1986)
CWP-039 (Boden, 1986)
CWP-029 (Violette, 1985)
CWP-028 (Leroux, 1985)
CWP-018 (Docherty, 1984)
CWP-012 (Smith, 1984)

REFERENCES

- Al-Dajani, Abdulfattah A. 1996. *Reflection moveout and parameter estimation for horizontal transverse isotropy*. M.Sc. thesis, CWP-234. Center for Wave Phenomena, Colorado School of Mines.
- Aldolaijan, Abdul. 1991. *Residual phase estimation by homomorphic transformation*. Ph.D. thesis, CWP-106. Center for Wave Phenomena, Colorado School of Mines.
- Alfaraj, Mohammed. 1993. *Transformation to zero offset for mode-converted waves*. M.Sc. thesis, CWP-132. Center for Wave Phenomena, Colorado School of Mines.
- Alkhalifah, Tariq. 1993. *Migration error in transversely isotropic inhomogeneous media*. M.Sc. thesis, CWP-138. Center for Wave Phenomena, Colorado School of Mines.
- Alkhalifah, Tariq. 1996. *Seismic processing intrinsically isotropic media*. Ph.D. thesis, CWP-236. Center for Wave Phenomena, Colorado School of Mines.
- Alvarez, Gabriel. 1995. *A comparison of moveout-based approaches to ground-roll and multiple suppression*. M.Sc. thesis, CWP-195. Center for Wave Phenomena, Colorado School of Mines.
- Anderson, John E. 1996. *Imaging in transversely isotropic media with a vertical symmetry axis*. Ph.D. thesis, CWP-201. Center for Wave Phenomena, Colorado School of Mines.
- Anno, Phil. 1992. *A Klein-Gordon acoustic theory*. Ph.D. thesis, CWP-117. Center for Wave Phenomena, Colorado School of Mines.
- Baoniu, Han. 2001. *The comparison of four closely related depth migration methods*. M.Sc. thesis, CWP-358. Center for Wave Phenomena, Colorado School of Mines.
- Behura, Jyoti. 2009. *Estimation and analysis of attenuation anisotropy*. Ph.D. thesis, CWP-639. Center for Wave Phenomena, Colorado School of Mines.
- Boden, Linda. 1986. *Sound speed profile inversion in the ocean*. M.Sc. thesis, CWP-039. Center for Wave Phenomena, Colorado School of Mines.
- Boden, Linda. 1989. *Modeling and inversion in the ocean waveguide using Born and Rytov approximations*. Ph.D. thesis, CWP-091. Center for Wave Phenomena, Colorado School of Mines.
- Brandsberg-Dahl, Sverre. 2001. *Imaging-inversion and migration velocity analysis in the scattering-angle/azimuth domain*. Ph.D. thesis, CWP-394. Center for Wave Phenomena, Colorado School of Mines.
- Cardona, Reynaldo. 2002. *Fluid substitution theories and multicomponent seismic characterization of fractured reservoirs*. Ph.D. thesis, CWP-434. Center for Wave Phenomena, Colorado School of Mines.
- Cheng, Dong-jie. 2004. *Inversion of gravity data for base salt*. M.Sc. thesis, CWP-470. Center for Wave Phenomena, Colorado School of Mines.
- Cheng, Tong. 1995. *Seismic data compression*. M.Sc. thesis, CWP-196. Center for Wave Phenomena, Colorado School of Mines.
- De Moraes, Fernando S. 1996. *The application of marginalization and local distributions to multidimensional Bayesian inverse problems*. Ph.D. thesis, CWP-227. Center for Wave Phenomena, Colorado School of Mines.
- Deng, H. L. 1992. *Seismic wave propagation in thinly-layered media with steep reflectors*. M.Sc. thesis, CWP-114. Center for Wave Phenomena, Colorado School of Mines.
- Deng, H. L. 1997. *A complexity analysis of generic optimization problems: Characterizing the topography of high-dimensional functions*. Ph.D. thesis, CWP-239. Center for Wave Phenomena, Colorado School of Mines.
- Dewangan, Pawan. 2004. *Processing and applications of mode-converted waves using the PP+PS=SS method*. Ph.D. thesis, CWP-495. Center for Wave Phenomena, Colorado School of Mines.
- Docherty, Paul. 1984. *A fast ray tracing routine for laterally inhomogeneous media*. M.Sc. thesis, CWP-018. Center for Wave Phenomena, Colorado School of Mines.
- Docherty, Paul. 1987. *Ray theoretical modeling, migration and inversion in two-and-one-half-dimensional layered acoustic media*. Ph.D. thesis, CWP-051. Center for Wave Phenomena, Colorado School of Mines.
- Dong, Wenjie. 1989. *Finite difference ray tracing and common shot inversion*. M.Sc. thesis, CWP-084. Center for Wave Phenomena, Colorado School of Mines.
- Douma, Huub. 2006. *A hybrid formulation of map migration and wave-equation-based migration using curvelets*. Ph.D. thesis, CWP-549. Center for Wave Phenomena, Colorado School of Mines.
- Emanuel, Jeff. 1989. *Common shot, prestack inversion and mode conversion analysis of physical model seismic data*. M.Sc. thesis, CWP-083. Center for Wave Phenomena, Colorado School of Mines.
- Fazzari, Francesca. 1992. *A dip-dependent divergence correction*. M.Sc. thesis, CWP-116. Center for Wave Phenomena, Colorado School of Mines.
- Fei, Tong. 1994. *Elimination of numerical dispersion in finite-difference modeling and migration by flux-corrected transport*. Ph.D. thesis, CWP-161. Center for Wave Phenomena, Colorado School of Mines.
- Fuck, Rodrigo Felício. 2008. *Modeling of seismic signature for reservoir characterization: Application involving fracture- and stress-induced seismic velocity anisotropy*. Ph.D. thesis, CWP-617. Center for Wave Phenomena, Colorado School of Mines.
- Geoltrain, Sebastian. 1989. *Asymptotic solutions to direct and inverse scattering in anisotropic elastic media*. Ph.D. thesis, CWP-082. Center for Wave Phenomena, Colorado School of Mines.
- Gouveia, Wenceslau P., Jr. 1996. *Bayesian seismic waveform data inversion: Parameter estimation and uncertainty analysis*. Ph.D. thesis, CWP-233. Center for Wave Phenomena, Colorado School of Mines.
- Grêt, Alex. 2004. *Time-lapse monitoring with coda wave interferometry*. Ph.D. thesis, CWP-492. Center for Wave Phenomena, Colorado School of Mines.
- Haney, Matthew. 2004. *An investigation of sealing and episodic pulsing of fluids at a minibasin-bounding growth fault from seismic reflection images*. Ph.D. thesis, CWP-494. Center for Wave Phenomena, Colorado School of Mines.
- Hedley, Justin P. 1991. *3-D migration via McClellan transformations on hexagonal grids*. M.Sc. thesis, CWP-110. Center for Wave Phenomena, Colorado School of Mines.
- Jaramillo, Herman. 1998. *Seismic data mapping*. Ph.D. thesis, CWP-284. Center for Wave Phenomena, Colorado School of Mines.
- Jilek, Petr. 2002. *Modeling and inversion of converted-wave reflection coefficients in anisotropic media: A tool for*

- quantitative AVO analysis*. Ph.D. thesis, CWP-400. Center for Wave Phenomena, Colorado School of Mines.
- Jorden, T.E. 1987. *Transformation to zero offset*. M.Sc. thesis, CWP-052. Center for Wave Phenomena, Colorado School of Mines.
- Kaczkowski, Peter. 1986. *Damped least squares inversion applied to ducted propagation of acoustic energy in the ocean*. M.Sc. thesis, CWP-047. Center for Wave Phenomena, Colorado School of Mines.
- LeRousseau, Jérôme. 2001. *Microlocal analysis of wave-equation imaging and generalized-screen propagators*. Ph.D. thesis, CWP-395. Center for Wave Phenomena, Colorado School of Mines.
- Leroux, Isabelle. 1985. *Qualitative analysis of sign-bit processing*. M.Sc. thesis, CWP-028. Center for Wave Phenomena, Colorado School of Mines.
- Liu, Zhenyue [Jonathan]. 1995. *Migration velocity analysis*. Ph.D. thesis, CWP-168. Center for Wave Phenomena, Colorado School of Mines.
- Malcolm, Alison E. 2005. *Data continuation for data regularization and internal multiples*. Ph.D. thesis, CWP-517. Center for Wave Phenomena, Colorado School of Mines.
- Mateeva, Albena. 2003. *Thin horizontal layering as a stratigraphic filter in absorption estimation and seismic deconvolution*. Ph.D. thesis, CWP-462. Center for Wave Phenomena, Colorado School of Mines.
- Mathewson, John. 2008. *Detection of channels in seismic images using the steerable pyramid*. M.Sc. thesis, CWP-614. Center for Wave Phenomena, Colorado School of Mines.
- Mehta, Kurang. 2007. *The virtual source method: Implementation issues, improvement using wavefield separation and application to time-lapse monitoring*. Ph.D. thesis, CWP-580. Center for Wave Phenomena, Colorado School of Mines.
- Melo, Gabriela. 2008. *Range and resolution analysis of wide-azimuth angle decomposition*. M.Sc. thesis, CWP-618. Center for Wave Phenomena, Colorado School of Mines.
- Meng, Zhaobo. 1999. *Tetrahedral based earth models, ray tracing in tetrahedral models and analytical migration velocity analysis*. Ph.D. thesis, CWP-296. Center for Wave Phenomena, Colorado School of Mines.
- Mikulich, Westin. 1992. *Steep-dip $v(z)$ imaging from an ensemble of Stolt-like migrations*. M.Sc. thesis, CWP-100. Center for Wave Phenomena, Colorado School of Mines.
- Murillo, Alejandro E. 1996. *Distributed seismic unix*. M.Sc. thesis, CWP-204. Center for Wave Phenomena, Colorado School of Mines.
- Pacheco, Carlos. 2004. *Time-lapse monitoring with multiply scattered waves*. M.Sc. thesis, CWP-489. Center for Wave Phenomena, Colorado School of Mines.
- Pech, Andrés. 2003. *Velocity analysis for laterally heterogeneous anisotropic media*. Ph.D. thesis, CWP-442. Center for Wave Phenomena, Colorado School of Mines.
- Perez, Gabriel. 1997. *The quality of the surface-consistency assumption in residual-statics estimation*. M.Sc. thesis, CWP-240. Center for Wave Phenomena, Colorado School of Mines.
- Quist, Patrick W. 1986. *Computational aspects of three-dimensional seismic inversion*. M.Sc. thesis, CWP-045. Center for Wave Phenomena, Colorado School of Mines.
- Robinson, Christopher. 2000. *The influence of vertical-path datuming on seismic data*. M.Sc. thesis, CWP-356. Center for Wave Phenomena, Colorado School of Mines.
- Rüger, Andreas. 1993. *Dynamic ray tracing and its application in triangulated media*. M.Sc. thesis, CWP-139. Center for Wave Phenomena, Colorado School of Mines.
- Rüger, Andreas. 1996. *Reflection coefficients and azimuthal AVO analysis in anisotropic media*. Ph.D. thesis, CWP-235. Center for Wave Phenomena, Colorado School of Mines.
- Salinas, Trino. 1996. *The influence of near-surface time anomalies in the imaging process*. M.Sc. thesis, CWP-237. Center for Wave Phenomena, Colorado School of Mines.
- Sarkar, Debashish. 2003. *Migration velocity analysis in factorized VTI media*. Ph.D. thesis, CWP-464. Center for Wave Phenomena, Colorado School of Mines.
- Sheaffer, Steve. 1999. *2.5D downward continuation of the seismic wavefield using Kirchhoff data mapping*. M.Sc. thesis, CWP-326. Center for Wave Phenomena, Colorado School of Mines.
- Smith, K. 1984. *Seismic tomography in boreholes using an algebraic reconstruction technique*. M.Sc. thesis, CWP-012. Center for Wave Phenomena, Colorado School of Mines.
- Sullivan, Michael F. 1987. *Prestack Kirchhoff inversion and modeling in 2.5 dimensions*. Ph.D. thesis, CWP-054. Center for Wave Phenomena, Colorado School of Mines.
- Sumner, Brian. 1988. *Asymptotic solutions to forward and inverse problems in isotropic elastic media*. Ph.D. thesis, CWP-075. Center for Wave Phenomena, Colorado School of Mines.
- Tjan, Timo. 1995. *Residual statics estimation for data from structurally complex areas using prestack depth migration*. M.Sc. thesis, CWP-186. Center for Wave Phenomena, Colorado School of Mines.
- Uzategui, Omar. 1994. *Depth migration in transversely isotropic media with explicit operators*. Ph.D. thesis, CWP-163. Center for Wave Phenomena, Colorado School of Mines.
- Van Wijk, Kasper. 2003. *Multiple scattering of surface waves*. Ph.D. thesis, CWP-461. Center for Wave Phenomena, Colorado School of Mines.
- Vasconcelos, Ivan. 2007. *Interferometry in perturbed media: Reciprocity theorems, deconvolution interferometry, and imaging of borehole seismic data*. Ph.D. thesis, CWP-581. Center for Wave Phenomena, Colorado School of Mines.
- Villarreal, Alberto. 1999. *Distributed seismic modeling*. M.Sc. thesis, CWP-290. Center for Wave Phenomena, Colorado School of Mines.
- Violette, Paul B. 1985. *Analysis of two-parameter constant background Born inversion for acoustic synthetic data*. M.Sc. thesis, CWP-029. Center for Wave Phenomena, Colorado School of Mines.
- Wang, Lan. 2000. *Estimation of multi-valued Green's function by dynamic ray tracing and true-amplitude Kirchhoff inversion in 3-D heterogeneous media*. Ph.D. thesis, CWP-357. Center for Wave Phenomena, Colorado School of Mines.
- Xu, Meng. 1996. *3-D common offset inversion in depth dependent media and its parallel implementation*. M.Sc. thesis, CWP-228. Center for Wave Phenomena, Colorado School of Mines.
- Xu, Xiaoxia [Ellen]. 2006. *Anisotropic geometrical-spreading*

- correction and its application in azimuthal AVO analysis*. Ph.D. thesis, CWP-560. Center for Wave Phenomena, Colorado School of Mines.
- Xuan, Ran. 2009. *Probabilistic micro-earthquake location for reservoir monitoring*. M.S. thesis, CWP-640. Center for Wave Phenomena, Colorado School of Mines.
- Zhu, Yaping. 2006. *Seismic wave propagation in attenuative anisotropic media*. Ph.D. thesis, CWP-551. Center for Wave Phenomena, Colorado School of Mines.
- Zuver, Brian G. 1987. *Asymptotic Fourier integral operator methods applied to the inverse problems of geometric acoustics*. Ph.D. thesis, CWP-059. Center for Wave Phenomena, Colorado School of Mines.