

## Biondo Biondi

### Education

- 1990 Ph.D. Geophysics Stanford University
- 1987 M.S. Geophysics Stanford University
- 1984 M.Sc. Electrical Engineering Politecnico di Milano

### Professional Experience

- 2010 - Present | Professor of Geophysics Stanford University
- 2006 - 2010 | Associate Professor of Geophysics Stanford University
- 1999 - 2006 | Associate Professor (Research) of Geophysics Stanford University
- 1998 - 1999 | Consulting Associate Professor of Geophysics Stanford University
- 1995 - 1997 | Acting Associate Professor of Geophysics Stanford University
- 1993 - 1994 | Consulting Associate Professor of Geophysics Stanford University
- 1993 - 2008 | Chief Technical Advisor 3DGeo Development Inc., Santa Clara, California
- 1991 - 1992 | Consulting Assistant Professor of Geophysics Stanford University
- 1990 - 1993 | Scientist Thinking Machines Corp., Cambridge, Massachusetts
- 1987 - 1990 | Research Assistant Geophysics, Stanford University
- 1987 | Research Geophysicist Total CFP, Paris, France

### Honors & Awards

- 2009 | **Honorable mention for Best Paper in Geophysics** from SEG (co-author)
- 2007 | **Distinguished Instructor Short Course** for the Society of Exploration Geophysicists and the European Association of Geoscientists and Engineers
- 2005 | **Louis Cagniard Award** from the European Association of Geoscientists and Engineers for the best poster presentation (co-author)
- 2004 | **Reginald Fessenden Award** from the Society of Exploration Geophysicists
- 1996 | Outstanding Contribution SEG 65th Annual Meeting

### University Service

- 2011 - Present | Program Director, Computational Geoscience Degree Program
- 2010 - Present | Co-Director, Center for Computational Earth and Environmental Sciences
- 2010 - Present | Co-Director, Stanford Earth Sciences Algorithms and Architectures Initiative

1998 - Present | Co-Director, Stanford Exploration Project

2011 - 2012 | Member, Ad-hoc Faculty Committee on the Stanford Research Computing Facility

2009 - 2010 | Member, Stanford Senate Committee on Research

2007 - 2008 | Member, Stanford Senate Committee on Research

2007 - 2010 | Member, Earth Sciences Council

2006 - 2007 | Member, School of Earth Sciences Web Advisory Committee

2005 - 2009 | Member of the Academic Oversight Committee of the Graduate Program in Earth, Energy, and Environmental Sciences

2005 - Present | Member of the Faculty Advisory Panel of the Stanford Center for Computational Earth and Environmental Science

2004 - 2005 | Member of the School of Earth Sciences Academic Program (Graduate) Committee

2004 - 2005 | Member of the School of Earth Sciences Computational Initiative Committee

2002 | Instructor at the Mathematical Geophysics (Summer) School

2000 - 2003 | Member of Teaching and Information Technology Geophysics Department Committee

1998 - 2003 | Organizing Committee, Stanford Mathematical Geophysics (Summer) School

1998 | Instructor at the Mathematical Geophysics (Summer) School

## Professional Activities

2012 | Invited speaker, Executive Exploration Forum, Schlumberger, Montecarlo, Monaco

2012 | Invited speaker, Workshop: Inversion-based High Resolution Imaging of Reservoirs, Meeting of Society of Exploration Geophysicists

2012 | Short Course Instructor, Pemex, Villahermosa, Mexico

2012 | Short Course Instructor, Ion Geophysical;, Houston, Texas

2012 | Short Course Instructor, TGS;, Houston, Texas

2011 | Short Course Instructor, Pemex, Villahermosa, Mexico

2011 | Short Course Instructor, Saudi Aramco, Dhaharain, Saudi Arabia

2011 | Short Course Instructor, Society of Exploration Geophysicists - Continuing Education , New Orleans, Louisiana

2011 | Short Course Instructor, WesternGeco-Schlumberger - Area Geophysicist University , Houston, Texas

2010 | Convenor of SEG (Summer) Research Workshop:Subsalt Exploration and Development: Four years later, what's new in acquisition, imaging and interpretation?

2009 | Invited speaker, Workshop: Full wave-equation methods for complex imaging challenges, Meeting of Society of Exploration Geophysicists

- 2009 | Invited speaker, Workshop: Reverse-Time Migration- Problems and Promises, Meeting of Society of Exploration Geophysicists
- 2009 | Keynote speaker, Research Workshop: SubSalt Imaging - focus on azimuth, European Association of Geoscientists and Engineers
- 2008 | Invited speaker, Workshop: Computing trends in O&G and Earth Sciences , Meeting of European Association of Geoscientists and Engineers
- 2008 | Invited speaker, Workshop: Reducing Cycle Time from seismic acquisition to interpretation, Meeting of European Association of Geoscientists and Engineers
- 2008 | Keynote speaker, Workshop: Interpreting Depth-Imaged Data – Case studies, examples, and pitfalls from the interpreters, Meeting of Society of Exploration Geophysicists
- 2007 - Present | Member, Editorial Board of the Journal on Imaging Sciences published by the Society for Industrial and Applied Mathematics
- 2007 | Short Course Instructor, Saudi Aramco, Dhaharain, Saudi Arabia
- 2006 | Short Course Instructor, Saudi Aramco, Dhaharain, Saudi Arabia
- 2006 | Keynote speaker, Seismic Imaging Symposium, Veritas-DGC, Calgary, Canada
- 2006 | Chairman of the SEG/EAGE (Summer) Research Workshop: Subsalt Exploration & Development: Imaging, interpretation & drilling- What have we learned.
- 2005 | Distinguished Scientist Lecture, BP Technology Center, Houston, Texas.
- 2005 | Invited speaker: Workshop on Computational Geosciences, Colorado School of Mines
- 2005 | Invited speaker: Department seminar at Rice University
- 2005 | Short Course Instructor, PDVSA, Puerto La Cruz, Venezuela
- 2004 | Invited speaker, Workshop: Geophysical Imaging, Rensselaer Polytechnic Institute
- 2004 | Invited speaker, Workshop: Estimation of accurate velocity macro-models in complex structures, Meeting of European Association of Geoscientists and Engineers
- 2004 | Invited speaker, International Conference Scientific Computing In Petroleum Industry, Beijing, China
- 2004 | Invited speaker, Workshop: Estimation of accurate velocity macro-models in complex structures, Meeting of European Association of Geoscientists and Engineers
- 2004 | Keynote speaker, Salt Tectonics Symposium at ExxonMobil Exploration Company, Houston, Texas
- 2003 | Convenor of EAGE-SEG (Summer) Research Workshop: Processing and imaging of seismic data using explicit or implicit velocity model information
- 2003 | Invited speaker, 12th International Workshop of IUGG's Commission on Controlled-Source Seismology
- 2002 | Convenor of SEG Workshop Passive Seismic Imaging
- 2002 | Invited speaker, Geophysical Society of Houston
- 2002 | Invited speaker, Special session: Depth Imaging, Meeting of Canadian Society of Exploration Geophysicists
- 2002 | Invited speaker, Interactive session: Wave equation versus ray based methods,

Meeting of European Association of Geoscientists and Engineers

2001 | Invited speaker, Geophysical Society of Houston

2001 | Invited speaker, Southeastern Geophysical Society

2001 | Invited speaker, Heiland Lecture at Colorado School of Mines

2001 | Convenor of SEG Workshop Seismic Imaging beyond Kirchhoff

2001 | Convenor of SEG Workshop Changing the way we work: e-business & the Internet

2001 | Invited speaker, International seminar on seismic migration and inversion, Seoul National University, South Korea.

2000 | Invited speaker, Incorporated Research Institutions for Seismology (IRIS) Workshop

2000 | Invited speaker, Workshop: Prestack Depth Imaging: Prospects and Challenges, Meeting of European Association of Geoscientists and Engineers

1999 | Invited Speaker, New Approaches to Seismic Imaging Workshop, 6th International Congress of the Brazilian Geophysical Society

1998 | Short Course Instructor, Daqing, China

1998 | Convenor of EAGE-SEG (Summer) Research Workshop: Depth Imaging of Seismic Reservoir Attributes

1996 - Present | Member, Research Committee of the Society of Exploration Geophysicists Research Committee

## Courses Taught

2012 (Spring) | GP385A Reflection Seismology [Enrolled 11]

2012 (Winter) | GP280 3-D Seismic Imaging [Enrolled 7]

2012 (Winter) | GP385A Reflection Seismology [Enrolled 13]

2011 (Fall) | GP385A Reflection Seismology [Enrolled 13]

2010 (Fall) | GP385A Reflection Seismology [Enrolled 12]

2010 (Fall) | GP400 Geophysics Research [Enrolled 6]

2010 (Spring) | GP385A Reflection Seismology [Enrolled 10]

2010 (Spring) | GP400 Geophysics Research [Enrolled 9]

2010 (Winter) | GP280 3-D Seismic Imaging [Enrolled 6]

2010 (Winter) | GP385A Reflection Seismology [Enrolled 11]

2010 (Winter) | GP400 Geophysics Research [Enrolled 10]

2009 (Fall) | GP385A Reflection Seismology [Enrolled 11]

2009 (Fall) | GP400 Geophysics Research [Enrolled 8]

2009 (Spring) | GP385A Reflection Seismology (with Claerbout) [Enrolled 5]

2009 (Spring) | GP280 3-D Seismic Imaging [Enrolled 7]

2009 (Winter) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 8]  
2009 (Fall) | GP385A Reflection Seismology (with Claerbout) [Enrolled 6]  
2008 (Fall) | GP385A Reflection Seismology (with Claerbout) [Enrolled 6]  
2008 (Winter) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 8]  
2008 (Spring) | GP385A Reflection Seismology (with Claerbout) [Enrolled 5]  
2008 (Spring) | GP280 3-D Seismic Imaging [Enrolled 7]  
2007 (Spring) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 6]  
2007 (Spring) | GP280 3-D Seismic Imaging [Enrolled 5]  
2007 (Winter) | GP385A Reflection Seismology (with Claerbout) [Enrolled 7]  
2007 (Fall) | GP385A Reflection Seismology (with Claerbout) [Enrolled 8]  
2006 (Winter) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 4]  
2006 (Fall) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 6]  
2005 (Winter) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 3]  
2005 (Fall) | GP385A/| GP185A Reflection Seismology (with Claerbout) [Enrolled 6]  
2004 | GP185A Reflection Seismology (with Claerbout) [Enrolled 1]  
2004 | GP255 Report on Energy Industry Training [Enrolled 1]  
2004 | GP280 3-D Seismic Imaging [Enrolled 3]  
2004 | GP385A Reflection Seismology (with Claerbout) [Enrolled 18]  
2004 | GP399 Teaching Experience [Enrolled 1]  
2004 | GP400 Geophysics Research [Enrolled 30]  
2003 | GP185A Reflection Seismology (with Claerbout) [Enrolled 1]  
2003 | GP255 Report on Energy Industry Training [Enrolled 1]  
2003 | GP280 3-D Seismic Imaging [Enrolled 3]  
2003 | GP385A Reflection Seismology (with Claerbout) [Enrolled 18]  
2003 | GP399 Teaching Experience [Enrolled 1]  
2003 | GP400 Geophysics Research [Enrolled 23]  
2002 | GP400 Geophysics Research [Enrolled 18]  
2002 | GP385A Reflection Seismology (with Claerbout) [Enrolled 24]  
2002 | GP185A Reflection Seismology (with Claerbout) [Enrolled 8]  
2002 | GP255 Report on Energy Industry Training [Enrolled 2]  
2002 | GP280 3-D Reflection Seismology [Enrolled 3]  
2001 | GP400 Research [Enrolled 2]  
2001 | GP385 Reflection Seismology (with Claerbout) [Enrolled 3]

- 2001 | GP400 Research [Enrolled 4]
- 2001 | GP385 Reflection Seismology (with Claerbout) [Enrolled 3]
- 2001 | GP399 Teaching Experience [Enrolled 1]
- 2001 | GP385 Reflection Seismology (with Claerbout) [Enrolled 4]
- 2001 | GP280 3-D Reflection Seismology [Enrolled 7]
- 2001 | GP400 Research [Enrolled 1]
- 2001 | GP255 Energy Industry Training [Enrolled 1]
- 2001 | GP385 Reflection Seismology (with Claerbout) [Enrolled 4]
- 2001 | GP400 Research [Enrolled 2]
- 2001 | GP185 Reflection Seismology (with Claerbout) [Enrolled 4]
- 2000 | GP210 Basic Earth Imaging [Enrolled 7]
- 2000 | GP280 Reflection Seismology [Enrolled 4]
- 2000 | GP185 Reflection Seismology (with Claerbout) [Enrolled 2]
- 2000 | GP385 Reflection Seismology (with Claerbout) [Enrolled 15]
- 2000 | GP400 Research [Enrolled 2]
- 1999 | GP385 Reflection Seismology (with Claerbout) [Enrolled 9]
- 1999 | GP185 Reflection Seismology (with Claerbout) [Enrolled 3]
- 1999 | GP280 Reflection Seismology [Enrolled 4]
- 1998 | GP385 Reflection Seismology (with Claerbout) [Enrolled 8]
- 1998 | GP280 Reflection Seismology [Enrolled 10]

## Publications

2013 \* | Tang, Y. and B. Biondi. Subsalt imaging by target-oriented inversion-based imaging:A 3D field-data example. *Geophysics*, v. 78, S47–S58.

2013 \* | Tang, Y. and B. Biondi. Subsalt velocity estimation by target-oriented wave-equation migration velocity analysis:A 3D field-data example. *Geophysics*, v. 78, U19–U29.

2012 | Almomin, A. and B. Biondi. Tomographic Full Waveform Inversion: Practical and Computationally Feasible Approach. In: proceedings of the 82d Annual International Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | Ayeni, G. and B. Biondi. Time-lapse seismic imaging by linearized joint inversion – A Valhall Field case study. In: proceedings of the 82d Annual International Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | Biondi, B. and A. Almomin. Tomographic full waveform inversion (TFWI) by combining full waveform inversion with wave-equation migration velocity analysis. In: proceedings of the 82d Annual International Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | Wong, M., B. Biondi and S. Ronen. Imaging with multiples using linearized full-wave inversion. In: proceedings of the 82d Annual International Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | Wong, M., S. Ronen and B. Biondi. Joint imaging with Streamer and OBN data. In: proceedings of the 82d Annual International

Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | Zhang, Y., B. Biondi and Y. Tang. Residual moveout-based wave-equation migration velocity analysis. In: proceedings of the 82d Annual International Meeting, Society of Exploration Geophysicists, pp. 1-5.

2012 | de Ridder, S., and B. Biondi. Continuous Passive Seismic Monitoring of CCS Projects by Correlating Seismic Noise - A Feasibility Study. In proceedings of the 74th Annual International Conference, European Association of Geoscientists & Engineers.

2012 | Zhang, Y., and B. Biondi. Residual moveout-based wave-equation migration velocity analysis. In proceedings of the 74th Annual International Conference, European Association of Geoscientists & Engineers.

2011 \* | Guerra, C., and B. Biondi. Fast 3D migration-velocity analysis by wavefield extrapolation using the prestack exploding-reflector model. *Geophysics*, v. 76, WB151-WB167.

2011 \* | Tang, C., and B. Biondi. Target-oriented wavefield tomography using synthesized Born data. *Geophysics*, v. 76, WB191-WB207.

2011 | Ayeni, G., and B. Biondi. Wave-equation inversion of time-lapse seismic data sets. In: proceedings of the 81st Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 4149-4154.

2011 | Li, Y., and B. Biondi. Migration velocity analysis for anisotropic models. In: proceedings of the 81st Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 201-206.

2011 | Tang, Y., and B. Biondi. Subsalt velocity analysis by target-oriented wavefield tomography: A 3-D field-data example. In: proceedings of the 81st Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 3958-3963.

2011 | Wong, M., S. Ronen and B. Biondi. Least-squares reverse time migration/inversion for ocean bottom data: A case study. In: proceedings of the 81st Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 2369-2373.

2010 \* | Biondi, B. **3-D Seismic Imaging**. Society of Exploration Geophysicists, Series: Investigations in Geophysics, Ed., G. Gardner - Second Edition.

2010 \* | Ayeni, A., and B. Biondi. Target-oriented joint least-squares migration/inversion of time-lapse seismic data sets. *Geophysics* v. 75, pp. 61-73

2010 \* | Biondi, B. Velocity estimation by image focusing analysis. *Geophysics* v. 75, pp. 49-60

2010 | Guerra, G., and B. Biondi. Fast 3D velocity updates using the pre-stack exploding reflector model. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 4375-4379.

2010 | Tang, Y., and B. Biondi. Target oriented tomography using Born data. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 4280-4285.

2010 | Biondi B. Velocity Estimation by Image Focusing Analysis. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 4066-4070.

2010 | de Ridder, S., and B. Biondi. Low frequency passive seismic interferometry for land data. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 4041-4046.

2010 | Wong, M., B. Biondi and S. Ronen. Joint least-squares inversion of up- and down-going signal for ocean bottom data sets. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 2752-2756.

- 2010 | Halpert, A., R. Clapp and B. Biondi. Speeding up seismic image segmentation. In: proceedings of the 80th Annual International Meeting, Society of Exploration Geophysicists, v. 29, pp. 1276-1280.
- 2010 | Biondi B. Velocity Estimation by Image Focusing Analysis. In: proceedings of the 72nd Annual International Conference, European Association of Geoscientists & Engineers.
- 2010 | Ayeni, G., Tang Y., and Biondo, B., 2010, Efficient Seismic Monitoring of Hydrocarbon Reservoirs Using Multiple Shooting Vessels, in proceedings of the 2010 Offshore Technology Conference.
- 2009 \* | Valenciano, A., B. Biondi, and R. Clapp. Imaging by target-oriented wave-equation inversion, *Geophysics*, v. 74, pp. WCA109
- 2009 \* | Shan, G., R. Clapp, and B. Biondi. 3D plane-wave migration in tilted coordinates: A field data example. *Geophysics*, v. 74, pp. WCA199
- 2009 | Ayeni, G., and B. Biondi. Joint target-oriented wave-equation inversion of multiple time-lapse seismic data sets. In: proceedings of the 79th Annual International Meeting, Society of Exploration Geophysicists, v. 28, pp. 3825-3829.
- 2009 | Ayeni, G., Y. Tang and B. Biondi. Joint preconditioned least-squares inversion of simultaneous source time-lapse seismic data sets. In: proceedings of the 79th Annual International Meeting, Society of Exploration Geophysicists, v. 28, pp. 3914-3918.
- 2009 | Guerra, C., Y. Tang and B. Biondi. Wave-equation tomography using image-space phase encoded data. In: proceedings of the 79th Annual International Meeting, Society of Exploration Geophysicists, v. 28, pp. 3964-3968.
- 2009 | Halpert, A., R.G. Clapp and B. Biondi. Seismic image segmentation with multiple attributes. In: proceedings of the 79th Annual International Meeting, Society of Exploration Geophysicists, v. 28, pp. 3700-3704.
- 2009 | Tang, Y., and B. Biondi. Least-squares migration/inversion of blended data. In: proceedings of the 79th Annual International Meeting, Society of Exploration Geophysicists, v. 28, pp. 2859-2863.
- 2009 | Jones, I.F., R.I. Bloor, B.L. Biondi, and J.T. Etgen, editors. *Prestack Depth Migration and Velocity Model Building*. Reprint Series, No. 25. Society of Exploration Geophysicists.
- 2008 \* | Rosales, D.A., S. Fomel, B. Biondi, and P. Sava. Angle-domain common-image gathers for converted-waves. *Geophysics*, v. 73, pp. S17-S26. 2008 \* | Shan, G., and B. Biondi. Plane-wave migration in tilted coordinates, *Geophysics*, v. 73, pp. S185-S194.
- 2008 | Valenciano, A., B. Biondi and R.G. Clapp. Imaging by target-oriented wave-equation inversion: 3-D field data results: In proceedings of the 78th Annual International Meeting, Society of Exploration Geophysicists, v. 27, pp. 2181-2185.
- 2008 | Shan, G. and B. Biondi. Angle-domain common-image gathers for steep reflectors: In proceedings of the 78th Annual International Meeting, Society of Exploration Geophysicists, v. 27, pp. 3068-3072.
- 2008 | Halpert, A., R.G. Clapp, J. Lomask, and B. Biondi. Image segmentation for velocity model construction and updating: In proceedings of the 78th Annual International Meeting, Society of Exploration Geophysicists, v. 27, pp. 3088-3092.
- 2008 | Bevc, D., M.M. Fliedner, and B. Biondi. Wavepath tomography for model building and hazard detection: In proceedings of the 78th Annual International Meeting, Society of Exploration Geophysicists, v. 27, pp. 3098-4002.

2008 | Guitton, A., M.M. Fliedner, B. Biondi, and F. Ortigosa. Fast velocity model building by plane-wave migration in tilted coordinates, automated volume-based picking, and tomography: In proceedings of the 78th Annual International Meeting, Society of Exploration Geophysicists, v. 27, pp. 3270-3274.

2008 | Prestack Depth Migration and Velocity Model Building: Edited by I.F. Jones, R.I. Bloor, B.L. Biondi and J.T. Etgen: Society of Exploration Geophysicists, Geophysics reprint series, No. 25.

2007 \* | Biondi, B. Angle-domain common image gathers from anisotropic migration. Geophysics, v. 72, pp. S81-S91. 2007 \* | Biondi, B. Residual moveout in anisotropic angle-domain common-image gathers. Geophysics, v. 72, pp. S93-S103.

2007 \* | Haines, S., A. Guitton, and B. Biondi. Seismoelectric data processing for surface surveys of shallow targets. Geophysics, v. 72, pp. G1-G8.

2007 \* | Haines, S., S. Pride, S. Klemperer, and B. Biondi. Seismoelectric imaging of shallow targets. Geophysics, v. 72, pp. G9-G20.

2007 | Biondi, B. Concepts and Applications in 3-D Seismic Imaging. Society of Exploration Geophysicists.

2007 \* | Guitton, A., B. Kaelin, and B. Biondi. Least-squares attenuation of reverse-time-migration artifacts. Geophysics, v. 72, pp. G19-G23.

2007 \* | Lomask, J., R.G. Clapp, and B. Biondi. Application of image segmentation to tracking 3D salt boundaries. Geophysics, v. 72, pp. P47-P56.

2007 \* | Alvarez, G., B. Biondi and A. Guitton. Attenuation of specular and diffracted 2D multiples in image space. Geophysics, v. 72. pp. v97-v109.

2007 | Fliedner, M.M., M. Brown, D. Bevc, and B. Biondi. Wavepath tomography for subsalt velocity-model building. In: proceedings of the 77th Annual International Meeting, Society of Exploration Geophysicists, v. 26, pp. 1938-1942.

2007 | Shan, G., R.G. Clapp, and B. Biondi. 3D plane-wave migration in tilted coordinates. In: proceedings of the 77th Annual International Meeting, Society of Exploration Geophysicists, v. 26, pp. 2190-2194.

2006 \* | Biondi, B. **3-D Seismic Imaging**. Society of Exploration Geophysicists, Series: Investigations in Geophysics, Ed., G. Gardner.

2006 \* | Rosales, D., and B. Biondi. Converted-wave azimuth moveout. Geophysics, v. 71, pp. S99-S110. 2006 \* | Valenciano, A., B. Biondi, and A. Guitton. Target-oriented wave-equation inversion. Geophysics, v. 71, pp. A35.

2006 | Gray, S., D. Trad, B. Biondi, and L. Lines. Towards wave-equation imaging and velocity estimation. Recorder, v. 31, pp. 47-53.

2006 | Bednar, J.B., W.L. Abriel, B. Biondi, S. Levin, and A. Cheng. SEG Advanced Modeling (SEAM) today and tomorrow. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 3531-3534.

2006 | Biondi, B. Prestack exploding-reflectors modeling for migration velocity analysis. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 3056-3060.

2006 | Fliedner, M.M., S. Crawley, D. Bevc, and B. Biondi. Accurate imaging of complex salt features with narrow azimuth migration. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 2609-2613.

2006 | Shan, G., and B. Biondi. Imaging steep salt flank with plane-wave migration in tilted coordinates. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 2372-2376.

2006 | Guitton, A., B. Kaelin, and B. Biondi. Least-square attenuation of reverse time migration artifacts. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 2348-2352.

2006 | Joussetin, P., and B. Biondi. Residual moveout in anisotropic angle-domain common-image gathers with dipping reflectors. In: proceedings of the 76th Annual International Meeting, Society of Exploration Geophysicists, v. 25, pp. 224-228.

2005 \* | Biondi, B., and D. Bevc. Seismic imaging of complex structures by reflection seismic data. AGU Monograph, Data Analysis and Imaging with Global and Local Arrays, Eds., A. Levander and G. Nolet.

2005 \* | Sava, P., B. Biondi, and J.T. Etgen. Diffraction-focusing migration velocity analysis with application to seismic and | GPR data. Geophysics, v. 70, pp. U19-27.

2005 \* | Bevc, D., and B. Biondi. Which depth imaging method should you use? A road map through the maze of possibilities. The Leading Edge, v. 24, pp. 602-606.

2005 | Biondi, B. Angle-domain common image gathers for anisotropic migration. In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, SPMI 4.5.

2005 | Shan, G., and B. Biondi. 3D wavefield extrapolation in laterally-varying tilted TI media. In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, ANI 1.3.

2005 | Rosales, D., and B. Biondi. Converted-waves angle-domain common-image gathers In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, MC 3.7.

2005 | Valenciano, A., and B. Biondi. Target-oriented wave-equation inversion. In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, SI 2.1.

2005 | Clapp, M., and B. Biondi. Regularized least-squares inversion for 3-D subsalt imaging. In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, SPMI 1.2.

2005 | Sen, S., and B. Biondi. Common azimuth migration for elliptical and VTI media. In: proceedings of the 75th Annual International Meeting, Society of Exploration Geophysicists, v. 24, SPMI 4.8.

2004 \* | Alkhalifah, T., and B. Biondi. Numerical analysis of the azimuth moveout operator for vertically inhomogeneous media. Geophysics, v. 69, pp. 554-561.

2004 \* | Clapp, R.G., B. Biondi, and J.F. Claerbout. Geologically constrained migration velocity analysis. Geophysics, v. 69, pp. 533-546.

2004 \* | Biondi, B., and W.W. Symes. Angle-domain common-image gathers for migration velocity analysis by wavefield-continuation imaging. Geophysics, v. 69, pp. 1283-1298.

2004 \* | Biondi, B., and T. Tisserant. 3-D angle-domain common-image gathers for migration velocity analysis. Geophysical Prospecting, v. 52, pp. 575-591.

2004 \* | Sava, P., and B. Biondi. Wave-equation migration velocity analysis - I: Theory, Geophysical Prospecting, v. 52, pp. 593-606.

2004 \* | Sava, P., and B. Biondi. Wave-equation migration velocity analysis - II: Subsalt imaging examples, *Geophysical Prospecting*, v. 52, pp. 607-623.

2004 | Rosales, D., and B. Biondi. Acquisition geometry regularization for multicomponent data, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 2052-2055.

2004 | Vlad, I., and B. Biondi. Velocity estimation for seismic data exhibiting focusing-effect AVO, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 2427-2430.

2004 | Sava, P., B. Biondi, and J.T. Etgen. Diffraction-focusing migration velocity analysis, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 2395-2398.

2004 | Draganov, D., K. Wapenaar, B. Artman, and B. Biondi. Migration methods for passive seismic data, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 1123-1127.

2004 | Tisserant, T., and B. Biondi. Residual move-out analysis with 3-D angle-domain common-image gathers, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 2391-2394.

2004 | Shan, G., and B. Biondi. Imaging overturned waves by plane-wave migration in tilted coordinates, In: proceedings of the 74th Annual International Meeting, Society of Exploration Geophysicists, v. 23, pp. 969-972.

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## Advisee Degrees

2011 | Gboyeag Ayeni: Time-lapse seismic imaging by linearized joint inversion, Ph.D. (ExxonMobil, Houston)

- 2011 | Yaxun Tang: Imaging and velocity analysis by target-oriented wavefield inversion, Ph.D. (ExxonMobil, Houston)
- 2010 | Claudio Guerra: Migration-velocity analysis using image-space generalized wavefields, Ph.D. (Petrobras, Rio de Janeiro, Brazil)
- 2009 | Jeff Shragge: Wave-equation migration in generalized coordinates, Ph.D. (University of Western Australia, Perth)
- 2009 | Abdullah Al-Theyab: Reverse-time migration with ODCIG computation on GPU, M.S. (Saudi Aramco)
- 2008 | Guojian Shan: Imaging of steep reflectors in anisotropic media by wavefield extrapolation, Ph.D. (Chevron, San Ramon)
- 2008 | Alejandro Valenciano: Imaging by wave-equation inversion, Ph.D. (PGS, Austin)
- 2007 | Gabriel Alvarez: Attenuation of multiples in image space, Ph.D. (Infopetrol, Colombia)
- 2007 | Roland Gunther, M.S. (Open Geophysical Inc., Houston)
- 2006 | Daniel Alejandro Rosales Roche: Imaging of converted-wave ocean-bottom seismic data, Ph.D. (Earthworks, Connecticut)
- 2006 | Brad Artman: Passive seismic imaging, Ph.D. (Spectraseis, Zurich, Switzerland)
- 2006 | Pierre Jousselin, M.S. (Total, France)
- 2006 | Madhav Vyas, M.S. (Schlumberger, Houston)
- 2005 | Marie L. Clapp: Imaging under salt by regularized inversion, Ph.D. (Chevron, San Ramon)
- 2004 | Morgan Brown: Least-squares joint imaging of multiples and primaries, Ph.D. (Wave Imaging Technology Inc., Houston)
- 2004 | Paul Sava: Migration and velocity analysis by wavefield extrapolation, Ph.D. (Colorado School of Mines)
- 2004 | Thomas Tisserant, M.S. (ConocoPhillips, Houston)
- 2002 | Andrey Karpushin, M.S. (WesternGeco, Houston)
- 2002 | Ioan Vlad, M.S. (StatoilHydro, Norway)
- 2001 | Carmen Mora, M.S. (Consultant, Spain)
- 2001 | Douglas Gratwick, M.S. (ExxonMobil, Houston)
- 2001 | Daniel Rosales, M.S. (Ph.D., Stanford)
- 2000 | Louis Vaillant, M.S. (UNILOG-SCL, France)
- 1999 | Nizar Chemingui: Imaging irregularly sampled 3D prestack data, Ph.D. (PGS, Houston)

## Advisee Publications

- 2012 \* | Li, Y., Y. Zhang and J. Claerbout. Hyperbolic estimation of sparse model from erratic data. *Geophysics*, v.77, pp. 1-9.
- 2012 \* | Tang, Y.. Imaging and velocity analysis by target-oriented wavefield inversion.

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2011 | De Ridder, S. and J. Dellinger. Ambient seismic noise eikonal tomography for near-surface imaging at Valhall. *The Leading Edge*, 30, no 5, pp. 936-942.

2009 \* | Tang, Y. Target-oriented wave-equation least-squares migration/inversion with phase-encoded Hessian. *Geophysics*, v.74, pp. 95-107.

2008 \* | Shragge, J.C.. Riemannian wavefield extrapolation: Nonorthogonal coordinate systems. *Geophysics*, v. 73, pp. T11-T22

2007 \* | Artman, B., G. Alvarez, and K. Matson. Image-space surface-related multiple prediction. *Geophysics*, v. 72, pp. S113-S122.

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## News & Media