

Børge Arntsen

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DATE OF BIRTH	May 5, 1957.	
PRESENT POSITION	Professor of Petroleum Geophysics, Norwegian University of Science and Technology, Trondheim.	
EDUCATION	1982 Cand. real. (MSc), Theoretical Physics AVH, University of Trondheim 1991 Dr. Scient (PhD), Physics AVH, University of Trondheim	
WORK	1982-1989 Research Physicist, IKU Petroleum Research 1989-1991 PhD stipendiate funded by the Royal Norwegian Council for Scientific and Industrial Research (NTNF) 1991-2008 Staff Geophysicist, Statoil Research Centre Project leader 1991-94: Seismic imaging Project leader 1995-97: Seismic data quality Geophysical Specialist 1998-2008 1997-1998 Visiting scientist, OGS, Trieste (July 97 - July 98) 2008- Professor of Petroleum Geophysics, NTNU	
HONORS AND AWARDS	Best poster paper Presented at the 2013 Annual meeting of the Society of Exploration Geophysicists Norwegian Geophysics Prize 2016 Member of Norwegian Academy of technological Sciences	
RESEARCH INTERESTS	Seismic Modeling, Seismic Imaging, Seismic Inversion, High-performance computing.	
RECENT PEER REVIEWED PAPERS	B. Solymoss, N. Favretto-Cristini, V. Monteiller, D. Komatitsch, P. Cristini, B. Arntsen and B. Ursin, 2018, How to adapt numerical simulation of wave propagation and ultrasonic laboratory experiments to be comparable? A case study for a complex topographic model, Volume 83, 1–62. Y. Liu, M. Landr, .B Arntsen, J. van der Neut, and K. Wapenaa, 2017 A new approach to separate seismic time-lapse time shifts in the reservoir and overburden Separating time-lapse time shifts, Geophysics, 82, Q67–Q78 E. B. Raknes and B. Arntsen, 2017, Challenges and solutions for performing 3D time-domain elastic full-waveform inversion, The Leading Edge, Volume 36, 88–93	

- Y. Liu, J. van der Neut, B. Arntsen and K. Wapenaar, 2016, Combination of surface and borehole seismic data for robust target-oriented imaging, *Geophysical Journal International*, Volume 205, 758–775
- M. Panzner, J. P. Morten, W. W. Weibull and B. Arntsen, 2016, Integrated seismic and electromagnetic model building applied to improve subbasalt depth imaging in the Faroe-Shetland Basin, *Geophysics*, Volume 81, E57–E68
- C. Wang, J. Cheng and B. Arntsen, 2016, Scalar and vector imaging based on wave mode decoupling for elastic reverse time migration in isotropic and transversely isotropic media, *Geophysics*, Volume 81, S383–S398
- Y. Liu, D. Draganov, K. Wapenaar and B. Arntsen, 2015, Retrieving virtual reflection responses at drill-bit positions using seismic interferometry with drill-bit noise, *Geophysical Prospecting*, , 1–13
- E. B. Raknes, B. Arntsen and W. Weibull, 2015, Three-dimensional elastic full waveform inversion using seismic data from the Sleipner area, *Geophysical Journal International*, Volume 202, 1877–1894
- E. B. Raknes, W. Weibull and B. Arntsen, 2015, Seismic imaging of the carbon dioxide gas cloud at Sleipner using 3D elastic time-lapse full waveform inversion, *International Journal of Greenhouse Gas Control*, Volume 42, 26–45
- E. B. Raknes and B. Arntsen, 2015, A numerical study of 3D elastic time-lapse full-waveform inversion using multicomponent seismic data, *GEOPHYSICS*, Volume 80, R303–R315
- E. B. Raknes and B. Arntsen, 2014, Time-lapse full-waveform inversion of limited-offset seismic data using a local migration regularization, *Geophysics*, Volume 79, WA117–WA128
- E. B. Raknes, W. Weibull and B. Arntsen, 2014, Elastic velocity analysis and time-lapse full-waveform inversion, *The Leading Edge*, Volume 33, 1000–1006
- W. W. Weibull and B. Arntsen, 2014, Anisotropic migration velocity analysis using reverse-time migration, *Geophysics*, Volume 79, R13–R25
- W. W. Weibull and B. Arntsen, 2014, Reverse-time demigration using the extended-imaging condition, *Geophysics*, Volume 79, WA97–WA105
- B. Arntsen, A. Kritski, B. Ursin and L. Amundsen, 2013, Shot-profile true amplitude crosscorrelation imaging condition, *Geophysics*, Volume 78, S221–S231
- W. W. Weibull and B. Arntsen, 2013, Automatic velocity analysis with reverse-time migration, *Geophysics*, Volume 78, S179–S192