

PASCAL AUDET

Earth and Environmental Sciences
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Research Interests

Subduction zones – Slow earthquakes – Crust and mantle structure – Tectonics of active plate boundaries – Earthquake seismology – Seismic anisotropy – Broadband ocean-bottom seismology

Experience

Visiting Professor, Victoria University of Wellington, 2020
Visiting Professor, University of Hawaii at Manoa, 2019
Associate Professor & University Research Chair, University of Ottawa, 2016 – 2021
Assistant Professor, University of Ottawa, 2011 – 2016
Miller Research Fellow, University of California Berkeley, 2008 – 2011

Education

Ph.D. Geophysics, University of British Columbia, Canada, 2008
M.Sc. Earth Sciences, Université du Québec à Montréal, Canada, 2005
B.Sc. Physics, Université de Montréal, Canada, 2003

Distinctions

- Member of the College of New Scholars, Artists and Scientists, Royal Society of Canada, 2018
- Young Scientist Award, Canadian Geophysical Union, 2018
- Young Researcher of the Year Award, University of Ottawa, 2017
- Excellence in Media Relations Award, University of Ottawa, 2016
- University Research Chair in Geophysics, University of Ottawa, 2016 – 2021
- Sloan Research Fellowship in Physics, Alfred P. Sloan Foundation, 2015 – 2017
- Early Researcher Award, Ontario Ministry of Research and Innovation, 2015 – 2020
- Personnalité de la semaine, Radio-Canada/Le Droit, 2015
- Miller Research Fellowship, University of California Berkeley, 2008 – 2011

Funding

- NRCan: Polar Continental Shelf Program, *Banks Island Seismic Network*, 2019 (\$34K), PI
- NSERC: Discovery Grant, *Onshore-offshore broadband seismic studies of Earth structure and tectonic processes*, 2018 – 2023 (\$255K), PI
- NSERC: Northern Supplement, *Broadband seismic studies of active tectonic processes in northwestern Canada*, 2018 – 2023 (\$75K), PI
- NRCan: Polar Continental Shelf Program, *Banks Island Seismic Network*, 2018 (\$32K), PI
- NSERC: Connect Program (Level 2 & 3), *EON-ROSE Symposium & CCArray Workshop*, 2018 (\$30K), PI
- CFI: Innovation Fund, *National Facility for Seismic Imaging*, 2017 (\$14.7M), co-PI
- NSERC: Engage Program, *High-resolution seismic tomography model of the Slave Craton for diamond exploration targeting*, 2017 (\$21K), PI
- NRCan: Polar Continental Shelf Program, *Banks Island Seismic Network*, 2017 (\$31K), PI
- University of Ottawa: University Research Chair, *Geophysics*, 2016 – 2021 (\$125K), PI
- Alfred P Sloan Foundation: Sloan Research Fellowship, *Geophysical investigation of human-*

induced deformation of the Earth's crust, 2015 – 2017 (\$50K USD), PI

- Ontario Ministry of Research and Innovation: Early Researcher Award, *Tectonic and anthropogenic deformation of the Earth's crust and mantle*, 2015 – 2020 (\$155K), PI
- NSERC: Engage Program, *Monitoring temporal variations of seismic velocities in underground mines using seismic interferometry*, 2014 (\$25K), PI
- CFI: Leaders Opportunity Fund, *Yukon-Northwest Seismograph Network*, 2012 (\$505K), PI
- NSERC: Discovery Grant, *Geophysical studies of plate boundary zone processes in western North America and lithospheric structure of terrestrial planets*, 2012 – 2018 (\$186K), PI
- NSERC: Northern Supplement, *Yukon-Northwest Seismograph Network: Broadband seismology in the northern Canadian Cordillera*, 2012 – 2018 (\$90K), PI

Professional Activities

Secretary of Solid Earth Section, Canadian Geophysical Union, 2017 –

Member of Science Advisory & Executive Committee, National Facility for Seismic Imaging, 2017 –

Member of Evaluation Committee, NSERC Scholarships and Fellowships, 2018 –

Member of Executive Committee, EON-ROSE & CCArray initiatives, 2017 –

Member of Evaluation Committee, Banting & Vanier competitions, University of Ottawa, 2017 –

Member of Faculty Council, Faculty of Sciences, University of Ottawa, 2015 – 2019

Member of Research Committee, Faculty of Sciences, University of Ottawa, 2015 – 2019

Member of Advisory Committee, USArray Transportable Array, 2015 – 2017

Member of Program Committee, AGU-CGU Joint Assembly, 2014 – 2015

Member of American Geophysical Union (AGU), Canadian Geophysical Union (CGU), Seismological Society of America (SSA)

Conference organizer

- EON-ROSE (formerly EarthsCAN) Symposium & CCArray Workshop, Ottawa, 2018
- Inaugural EarthsCAN workshop, Whitehorse, 2016
- EarthsCAN planning workshop, Ottawa, 2016

Convener and Chair of scientific sessions at national/international events:

- SSA Annual Meeting, Vancouver, 2019
- CGU Annual Meeting, Niagara Falls, 2018
- AGU Fall Meeting, New Orleans, 2017
- CGU Annual Meeting, Vancouver, 2017
- GeoPRISM workshop, San Francisco, 2016
- AGU-CGU Joint Assembly, Montreal, 2015
- CGU Annual Meeting, Banff, 2014
- AGU-CGU Joint Assembly, Toronto, 2009
- AGU Fall Meeting, San Francisco, 2009
- CGU Annual Meeting, Banff, 2008
- AGU Fall Meeting, San Francisco, 2007

External Peer Reviewer for grant proposals:

- Deutsche Forschungsgemeinschaft (DFG), Germany, 2014, 2017
- Natural Environment Research Council (NERC), UK, 2014
- Natural Science and Engineering Research Council (NSERC), (Total of 4), 2013 – 2018
- Marsden Fund, New Zealand (Total of 2), 2013, 2015
- National Science Foundation (NSF), Earthscope Program (Total of 15), 2009 – 2018
- Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT), Québec, Canada (Total of 2), 2015
- AGU Chapman conference, 2015
- NASA, Earth Surface Interior focus area, 2016
- Canada Research Chair program, 2017

Regular reviewer for 20+ journals (average of 2+ reviews per month)

Group Members

Graduate students

- Clément Estève, PhD (**KEGS & Brian Rust Scholar, CGU best student presentation award**), Teleseismic structure of northwestern Canada, 2016 –
- Stephen Mosher, PhD (**NSERC CGS, KEGS, SEG & CSEG Scholar**), Seismicity of the Cascadia subduction zone, 2017 –
- Jeremy Gosselin, PhD (**Vanier CGS & CSEG Scholar**), Seismic structure of plate boundaries offshore western Canada, 2017 –
- Morgan McLellan, PhD, Geophysical study of subduction zone slow earthquakes, 2018 –
- Hao Mai, PhD, Machine learning in seismology, 2019 –
- ZheZhe Lu, Visiting PhD student, Elastic thickness in the Pacific, 2019 –

Former members

- Dr. Shutian Ma, Research Associate, 2015 – 2018
- Andrew Schaeffer, PDF, 2015-2018, **Banting Fellow** and **NSERC Fellow**, *now Research Seismologist at Natural Resources Canada*
- Philippe Dales, PhD, 2018, Interferometric methods for seismic monitoring in industrial environments; *now PDF at U. Grenoble*
- Élyse Gaudreau, MSc, 2018, Thermochronologic and geophysical investigations of the northern Canadian Cordillera; *now PhD student at U. Victoria (KEGS Scholar)*
- Andrew Reynen, MSc, 2017, Supervised machine learning on a network scale; *now Applied Geophysicist at Nanometrics Inc.*
- Morgan McLellan, MSc, 2016, Rayleigh-wave tomography study of the northern Canadian Cordillera; *now PhD student in my group (GAC-MAC best student paper award)*
- Stephen Mosher, MSc, 2016, Ambient-noise processing for P-wave recovery across the San Andreas Fault near Parkfield, California; *now PhD student in my group (OGS Scholar)*
- Azadeh Ashoori, MSc, 2016 (**CSEG Scholar**), Receiver functions in the northern Canadian Cordillera; *current position unknown*
- Élise Cossette, MSc, 2015 (**OGS Scholar**) Elastic and seismic anisotropy in the Cyclades, Greece; *now Freelancer*
- Alizia Tarayoun, MSc, 2015 (French intern), Architecture of the crust and uppermost mantle in the northern Canadian Cordillera from receiver functions; *now PhD student at Montpellier*
- Louisa Murray-Bergquist, BSc Summer Intern, 2018, *now MSc student at U. Munich*
- Marc Aubin, BSc Honours, 2018, *current position unknown*
- Karyne Faguy, BSc Honours, 2018, *current position unknown*
- Antonio Di Loreto, BSc Honours, 2017, *current position unknown*
- Alex Mackay-Hill, BSc Honours, 2017, *now MSc student at U. Ottawa*
- Louisa Murray-Bergquist, BSc Summer intern, 2016, *now MSc student at U. Munich (KEGS Scholar)*
- Christian Sole, BSc UROP, 2016, *now MSc student at U. Ottawa (OGS Scholar)*
- Stéphane Gaston Faubert, BSc Honours, 2015, *current position unknown*
- Philippe Dales, BSc Honours, 2014, *now PDF at U. Grenoble*
- Morgan McLellan, BSc Honours, 2014, *now PhD student in my group*
- Andrew Reynen, BSc Honours, 2014, *now Applied Geophysicist at Nanometrics Inc., Ottawa*
- Stephen Mosher Honours, BSc, 2013, *now PhD student in my group (OGS & KEGS Scholar)*
- Alexandre Plourde, BSc UROP, 2012, *now PhD student at UBC (NSERC Scholar)*
- Marie-Ève Lajoie, BSc UROP, 2012, *now Geologist at Osisko Mining Inc., Newfoundland*

Contributions

Note: Trainees are underlined: *undergraduate, †graduate, ‡postdoc and research staff

Bibliometrics (Google Scholar)

Citation count: 1614
h-index: 21
i-10 index: 26
Publications: 47

Softwares

- **Audet, P.**, Thomson, C.J., & Bostock, M.G. 2019, Telewavesim: Python software for teleseismic body-wave modeling, *Journal of Open Source Software*. 4(42), 1779. <https://doi.org/10.21105/joss.01779>

Submitted

- †Estève, C., **Audet, P.**, Schaeffer, A.J., Schutt, D., Aster, R., & Cubley, J. The upper mantle structure of northwestern Canada from body wave tomography, *Journal of Geophysical Research*
- †Gaudreau, E., Schneider, D.A., & **Audet, P.** Widespread Cretaceous exhumation of the Yukon Tanana Terrane, west-central Yukon: Upper crustal tectonism resolved by (U-Th)/He thermochronology, in revision, *Lithosphere*.

Peer-Reviewed Publications

2019

- **Audet, P.**, Currie, C.A., †Schaeffer, A.J., & *Hill, A.M., 2019, Seismic evidence for lithospheric thinning and heat in the northern Canadian Cordillera, *Geophysical Research Letters*, 46, 4249-4257.
- **Audet, P.**, & †Gosselin, J.M., 2019, Curie depth estimation from magnetic anomaly data: A re-assessment using multitaper spectral analysis and Bayesian inference, *Geophysical Journal International*, 218, 494-507.
- Chen, Y., Gu, Y.J., Currie, C.A., Johnston, S.T., Hung, S.-H., †Schaeffer, A.J., & **Audet, P.**, 2019, Seismic evidence for mantle suture and implications for the origin of the southern Canadian Cordillera, *Nature Communications*, 10, 2249.
- †Estève, C., †Schaeffer, A.J., & **Audet, P.**, 2019, Upper mantle structure beneath the Slave craton from teleseismic body-wave tomography, *Tectonophysics*, 757, 187-202.
- †Gaudreau, E., **Audet, P.**, & Schneider, D.A. Mapping Curie depth across western Canada from a wavelet analysis of magnetic anomaly data, *Journal of Geophysical Research*, 124, 4365-4285.
- †Gosselin, J.M., **Audet, P.**, †Estève, C., †McLellan, M., †Mosher, S., & Schaeffer, A.J. Seismic evidence for megathrust fault-valve behavior during episodic tremor and slip, in revision, *Science Advances*.

2018

- **Audet, P.**, & ‡Ma, S., 2018, Deep crustal earthquakes in the Beaufort Sea, western Canadian Arctic, from teleseismic depth phase analysis, *Seismological Research Letters*, 89, 1379-1384.
- **Audet, P.**, & ‡Schaeffer, A.J., 2018, Fluid pressure and shear zone development over the locked to slow slip region in Cascadia, *Science Advances*, 4, eaar2982.
- †McLellan, M., †Schaeffer, A.J., & **Audet, P.**, 2018, Structure and fabric of the crust and uppermost mantle in the northern Canadian Cordillera from Rayleigh-wave tomography,

Tectonophysics, 724-725, 28-41.

- †Moshier, S., & Audet, P., 2018, Recovery of P-waves from ambient noise interferometry of borehole seismic data around the San Andreas Fault in central California, *Bulletin of the Seismological Society of America*, 108, 51-65.
- Steffen, R., Audet, P., & Lund, B., 2018, Weakened lithosphere beneath Greenland from effective elastic thickness estimates: A hotspot effect? *Geophysical Research Letters*, 45, 4733-4742.

2017

- †Dales, P., Audet, P., & Olivier, G., 2017, Seismic interferometry using persistent noise sources for temporal subsurface monitoring, *Geophysical Research Letters*, 44, 10,863-10,870.
- †Dales, P., Audet, P., Olivier, G., & Mercier, J.-P., 2017, Interferometric methods for spatio-temporal seismic monitoring in underground mines, *Geophysical Journal International*, 210, 731-742.
- †Ma, S., & Audet, P., 2017, Seismic velocity model of the crust in the northern Canadian Cordillera from Rayleigh-wave dispersion data, *Canadian Journal of Earth Sciences*, 54, 163-172.
- †Ma, S., Audet, P., & †Dales, P., 2017, Source properties of the 16 July 2014, magnitude ~4.5 double earthquakes in the northern Canadian Cordillera, *Seismological Research Letters*, 88, 1433-1442.
- †Reynen, A., & Audet, P., 2017, Supervised machine learning on a network scale with applications to seismic event classification and detection, *Geophysical Journal International*, 210, 1394-1409.
- †Tarayoun, A., Audet, P., Mazzotti, S., & †Ashoori, A., 2017, Architecture of the crust and uppermost mantle in the northern Canadian Cordillera from receiver functions, *Journal of Geophysical Research*, 122, 5268-5287.

2016

- Audet, P., 2016, Teleseismic receiver functions using OBS data: Promises and limitations from numerical modelling and examples from the Cascadia Initiative, *Geophysical Journal International*, 205, 1740-1755.
- Audet, P., & Kim, Y., 2016, Teleseismic constraints on the geological environment of deep slow earthquakes in subduction zone forearcs: A review, *Tectonophysics*, 670, 1-15 (INVITED REVIEW).
- Audet, P., *Sole, C., & †Schaeffer, A.J., 2016, Control of lithospheric inheritance on neotectonic activity in northwestern Canada?, *Geology*, 44, 807-810.
- †Cossette, E., Audet, P., Schneider, D.A., & Graseman, B., 2016, Structure and anisotropy of the crust in the Cyclades, Greece, using receiver functions constrained by in situ rock textural data, *Journal of Geophysical Research*, 121, 2661-2678.

2015

- Audet, P., 2015, Layered crustal anisotropy around the San Andreas Fault near Parkfield, California, *Journal of Geophysical Research*, 120, 3527-3543.
- †Cossette, E., Schneider, D.A., Audet, P., Graseman, B., & Habler, G., 2015, Seismic properties and mineral crystallographic preferred orientations from EBSD data: Results from a crustal-scale detachment system, Aegean region, *Tectonophysics*, 651, 66-78.
- †Plourde, A., Bostock, M.G., Audet, P., & Thomas, A.M., 2015, Low-frequency earthquakes at the southern Cascadia margin, *Geophysical Research Letters*, 42, 4849-4855.

2014

- Amos, C.B., **Audet, P.**, Hammond, W.C., Bürgmann, R., Johansson, I., & Blewitt, G., 2014, Uplift and seismicity driven by groundwater depletion in central California, *Nature*, 509, 483-486.
- **Audet, P.**, 2014, Toward mapping the effective elastic thickness of planetary lithospheres from a spherical wavelet analysis of gravity and topography, *Physics of the Earth and Planetary Interiors*, 226, 48-82. (INVITED REVIEW)
- **Audet, P.**, & Bürgmann, R., 2014, Possible control of subduction zone slow-earthquake periodicity by silica enrichment, *Nature*, 510, 389-392.
- Ma, S., & **Audet, P.**, 2014, The 5.2 magnitude earthquake near Ladysmith, Quebec, 17 May 2013: implications for the seismotectonics of the Ottawa-Bonnechere Graben, *Canadian Journal of Earth Sciences*, 51, 439-451.
- Mosher, S., **Audet, P.**, & L'Heureux, I., 2014. Seismic evidence for rotating mantle flow around subducting slab edge associated with micro-plate capture, *Geophysical Research Letters*, 41, 4548-4553.
- Thurber, C.H., Zeng, X., Thomas, A.M., & **Audet, P.**, 2014, Phase-weighted stacking applied to low-frequency earthquakes, *Bulletin of the Seismological Society of America*, 104, 2567-2572.

2013

- **Audet, P.**, 2013, Seismic anisotropy of subducting oceanic uppermost mantle from fossil spreading, *Geophysical Research Letters*, 40, 173-177.
- **Audet, P.**, & Schwartz, S.Y., 2013, Hydrologic control of fore arc strength and seismicity in the Costa Rican subduction zone, *Nature Geoscience*, 6, 352-355.

2012

- Tesauro, M., **Audet, P.**, Kaban, M., Bürgmann, R., & Cloetingh, S., 2012, The effective elastic thickness of the continental lithosphere: Comparison between rheological and inverse approaches, *Geochemistry, Geophysics, Geosystems*, 13, Q09001.

2011

- **Audet, P.**, 2011, Directional wavelet analysis on the sphere: Application to gravity and topography of the terrestrial planets, *Journal of Geophysical Research – Planets*, 116, E01003.
- **Audet, P.**, & Bürgmann, R., 2011, Dominant role of tectonic inheritance in supercontinent cycles, *Nature Geoscience*, 4, 184-187.
- Peacock, S.M., Christensen, N.I., Bostock, M.G., & **Audet, P.**, 2011, High pore pressures and porosity at 35 km depth in the Cascadia subduction zone, *Geology*, 39, 471-474.

Pre-2011

- **Audet, P.**, 2010, Temporal variations in crustal velocity structure near Parkfield, California, using receiver functions, *Bulletin of the Seismological Society of America*, 100, 1356-1362.
- **Audet, P.**, Bostock, M.G., Boyarko, D.C., Brudzinski, M.R., & Allen, R.M., 2010, Slab morphology in the Cascadia fore arc and its relation to episodic tremor and slip, *Journal of Geophysical Research*, 115, B00A16.
- **Audet, P.**, Bostock, M.G., Christensen, N.I., & Peacock, S.M., 2009, Seismic evidence for overpressured subducted oceanic crust and megathrust fault sealing, *Nature*, 457, 76-68.
- **Audet, P.**, Bostock, M.G., Mercier, J.-P., & Cassidy, J.F., 2008, Morphology of the Explorer/Juan de Fuca slab edge in northern Cascadia: Imaging plate capture at a ridge-trench-transform triple junction, *Geology*, 36, 895-898.
- Mercier, J.-P., Bostock, M.G., **Audet, P.**, Gaherty, J.B., Garnero, E.J., & Revenaugh, J.,

2008, The teleseismic signature of fossil subduction: Northwestern Canada, *Journal of Geophysical Research*, 113, B04308.

- **Audet, P.**, Bostock, M.G., & Mercier, J.-P., 2007, Teleseismic waveform modeling with a one-way wave equation, *Geophysical Journal International*, 171, 1212-1225.
- **Audet, P.**, Jellinek, A.M., & *Uno, H., 2007, Mechanical controls on the deformation of continents at convergent margins, *Earth and Planetary Science Letters*, 264, 151-166.
- **Audet, P.**, & Mareschal, J.-C., 2007, Wavelet analysis of the coherence between Bouguer gravity and topography: Application to the elastic thickness anisotropy in the Canadian Shield, *Geophysical Journal International*, 168, 287-298.
- **Audet, P.**, & Mareschal, J.-C., 2004, Anisotropy of the flexural response of the lithosphere in the Canadian Shield, *Geophysical Research Letters*, 31, L20601.
- **Audet, P.**, & Mareschal, J.-C., 2004, Variations in elastic thickness in the Canadian Shield, *Earth and Planetary Science Letters*, 226, 17-31.

Peer-Reviewed Conference Papers

- Hayek, S., Hunter, J., Motazedian, D., **Audet, P.**, & Crane, S., 2015, Studies of weak ground motion recordings over soft sediment-filled basins in Ottawa, Ontario, *The 11th Canadian Conference on Earthquake Engineering*. (Graduate course project)

Non Peer-Reviewed Publications and Theses

- Eaton, D.W., Boggs, K.J.E., James, T.S., Droboth, J.C., and **Audet, P.**, 2019, CCArray and EON-ROSE: Emerging pan-Canadian multidisciplinary research initiatives, *CSEG Recorder*, January issue, 26-29, <https://csegrecorder.com/blog/view/ccarray-and-eon-rose-emerging-pan-canadian-multidisciplinary-research>.
- Boggs, K.J.E., **Audet, P.**, et al., 2018, EON-ROSE: Integrating climate science and Earth science, *CMOS-SCMO Bulletin*, <http://bulletin.cmos.ca/eon-rose/>
- Boggs, K.J.E., Aster, R., **Audet, P.** et al., 2018, EON-ROSE and the Canadian Cordillera Array - Building Bridges to Span Earth System Science in Canada, *Geoscience Canada*, 45, 97-109, <https://journals.lib.unb.ca/index.php/GC/article/view/26037>
- **Audet, P.**, 2016, Gravitational signature of surface mass changes surrounding Canada's oil sands extraction sites? *Report to the Alfred P. Sloan Foundation*.
- **Audet, P.**, 2014, The upper crust, *International Innovation*, 144, 76-78.
- **Audet, P.**, 2012, The many ripples of giant earthquakes, *uOttawa Gazette*.
- Bürgmann, R., and **Audet, P.**, 2011, Continental Jelly, *Nature*, 471, 312-313. (News & Views commentary)
- Bürgmann, R., et al., 2011, TremorScope: Imaging the deep workings of the San Andreas Fault, *Berkeley Seismological Laboratory Annual Report*
- **Audet, P.**, 2011, Seismic imaging of the San Andreas Fault in northern California using receiver functions, *Berkeley Seismological Laboratory Annual Report*
- **Audet, P.**, & Bürgmann, R., 2010, Global effective elastic thickness, mechanical anisotropy, and the supercontinent cycle, *Berkeley Seismological Laboratory Annual Report*
- **Audet, P.**, 2009, Crustal stress and mechanical anisotropy of the lithosphere in western North America, *Berkeley Seismological Laboratory Annual Report*
- **Audet, P.**, 2009, Temporal variations in crustal scattering structure near Parkfield, California, from receiver functions, *Berkeley Seismological Laboratory Annual Report*
- **Audet, P.**, 2008, Seismic and mechanical attributes of lithospheric deformation and subduction in western Canada, *PhD Thesis*, University of British Columbia.

- **Audet, P.**, 2005, Flexure of the lithosphere in the Canadian Shield, *MSc Thesis*, Université du Québec à Montréal.

Invited Colloquium Lectures

- 2020: Victoria University of Wellington; University of Tokyo
- 2019: University of Texas at Austin; Geological Survey of Canada – Pacific; Canadian Hazard Information Service; Yukon Geological Survey; University of Hawaii at Manoa
- 2018: University of Toronto; University of Alberta; École Polytechnique Montréal
- 2017: Université de Montpellier
- 2016: University of Tokyo
- 2015: Massachusetts Institute of Technology; Princeton University; Simon Fraser University; Université du Québec à Montréal; University of British Columbia; University of Victoria; Geological Survey of Canada
- 2014: Harvard University; Carnegie Institution of Washington
- 2013: Geological Survey of Canada – Ontario
- 2011: Swiss Federal Institute of Technology; University of California Santa Cruz; University of California Davis
- 2010: University of Oregon; University of Ottawa; University of Texas at Austin; University of California Berkeley;
- 2009: Carnegie Institution of Washington; University of California Santa Cruz; California Institute of Technology; United States Geological Survey; McGill University;
- 2008: University of California Berkeley; Geological Survey of Canada – Pacific
- 2007: Geological Survey of Canada – Pacific

Invited Conference Presentations

1. **Audet, P.**, & Schaeffer, A.J. Resolving plate structure across the seismogenic to slow slip zone in Cascadia from onshore-offshore receiver function imaging, *IUGG General Assembly*, Montreal, Canada, 2019.
2. **Audet, P.** Effective elastic thickness of the lithosphere from gravity and topography data, *NOR-R-AM course on Arctic Tectonics, Volcanism and Climate*, Svalbard, Norway, 2018
3. **Audet, P.** The structural environment of deep subduction zone slow earthquakes, *International Joint Workshop on Slow Earthquakes*, Fukuoka, Japan, 2018
4. **Audet, P.** Modeling and circumventing the effect of sediments and water column on teleseismic receiver functions, *AGU Fall Meeting*, New Orleans, USA, 2017
5. **Audet, P.** National Facility for Seismic Imaging, *CCArray Scientific Workshop*, Sidney, Canada, 2017
6. **Audet, P.** Seismic and geophysical studies of western Canada, *GeoPRISMS Workshop*, San Francisco, USA, 2016
7. **Audet, P.** Seismic evidence and implications of fluids along the subduction zone megathrust, *INSTOC Symposium*, Cornell University, Ithaca, 2016
8. **Audet, P.** Teleseismic scattering constraints on the geological environment of deep episodic slow earthquakes in subduction zone forearcs, *AGU Chapman Conference*, Ixtapa, Mexico, 2016
9. **Audet, P.** Layered anisotropy around the San Andreas Fault near Parkfield, California: Structural control on seismic and aseismic behaviour, *AGU Fall Meeting*, San Francisco, USA, 2015.
10. **Audet, P.** Structural and hydrologic controls of subduction zone slow earthquakes, *AGU-*

CGU Joint Assembly, Montreal, Canada, 2015.

11. **Audet, P.** Effective elastic thickness of planetary lithosphere from gravity and topography, *AGU Fall Meeting*, San Francisco, USA, 2014.
12. **Audet, P.** Seismic evidence for hydrologic controls of episodic slow earthquakes and upper plate strength in subduction zone forearcs, *GSA Annual Meeting*, Denver, USA, 2013.
13. **Audet, P.** Plate deformation and supercontinent cycles, *GSA Annual Meeting*, Charlotte, USA, 2012 (**Pardee Symposium Speaker**).
14. **Audet, P.** The fate of fluids in subduction zones, *CGU Annual Meeting*, Banff, Canada, 2012 (**Keynote**).
15. **Audet, P.**, Bostock, M.G., Peacock, S.M., & Christensen, N.I. Seismic and hydrologic properties of the subducted oceanic crust in Cascadia, *AGU Fall Meeting*, San Francisco, USA, 2011.
16. **Audet, P.** Seismic imaging of the subducting oceanic crust in Cascadia, *International Lithosphere Program workshop*, Piemonte, Italy, 2011.
17. **Audet, P.**, & Bostock, M.G. Slab morphology and tremor along Cascadia, *Cascadia Initiative Workshop*, Portland – OR, USA, 2010.
18. **Audet, P.**, Bostock, M.G., Mercier, J.-P., & Cassidy, J.F. Mapping the northern limit of subduction in Cascadia using POLARIS broadband seismic stations, *AGU-CGU Joint Assembly*, Toronto, Canada, 2009.
19. **Audet, P.** Episodic motions at subduction zones, *GEOTOP Research Centre Annual Retreat*, Montreal, Canada, 2009 (**Keynote**).

Contributed Conference Presentations (first author, international conferences only)

20. **Audet, P.**, †Gosselin, J.M., & Schaeffer, A.J. Onshore-offshore 3-D seismic velocity structure in western Canada from surface-wave tomography, *AGU Annual Meeting*, San Francisco CA, 2019.
21. **Audet, P.**, Schaeffer, A.J., Currie, C., †Esteve, C., Schutt, D., Aster, R., Freymueller, J., Cubley, J., Khare, A. Nature and thermal state of the Cordilleran lithosphere in northwestern Canada from a compilation of broadband seismic studies, *SSA Annual Meeting*, Seattle WA, 2019 (Oral). *Also presented at *IUGG General Assembly*, Montreal, Canada, 2019.
22. **Audet, P.**, †Gosselin, J.M., & †Gaudreau, E. Estimating Curie depth of western Canadian and Arctic lithosphere from magnetic anomaly data using multitaper spectral analysis and Bayesian inference, *AGU Annual Meeting*, Washington DC, 2018 (Poster).
23. **Audet, P.**, †Schaeffer, A.J., & †Ma, S. Seismic data resolve deep crustal earthquake and seismic velocity structure beneath the Beaufort Sea, western Canadian Arctic, *Yellowknife Geoscience Forum*, Yellowknife, 2018 (Poster).
24. **Audet, P.**, †Schaeffer, A.J., & †Ma, S. Constraints on crustal structure and seismicity surrounding the Beaufort Sea, western Canadian Arctic, from broadband seismic data, *CGU-SSA-CIG Joint Meeting*, Niagara Falls, 2018 (Poster).
25. **Audet, P.**, & †Schaeffer, A.J. Resolving plate structure across the seismogenic zone in Cascadia using receiver functions from onshore-offshore seismic data, *AGU Fall Meeting*, New Orleans, 2017 (Oral).
26. **Audet, P.** Imaging the subducting oceanic crust across the seismogenic transition in Cascadia from onshore-offshore broadband seismic data, *OBSIP workshop*, Portland (ME), 2017 (Poster).
27. **Audet, P.**, Nedimovic, M., & the NFSI team. The National Facility for Seismic Imaging: A new large Canadian fleet of broadband OBS stations, *OBSIP workshop*, Portland (ME),

- 2017 (Poster).
28. **Audet, P.**, †Schaeffer, A.J., †McLellan, M., †Tarayoun, A., & *Sole, C. Structure and deformation of the northern Canadian Cordillera: A broadband seismic reconnaissance study, *CGU Annual Meeting*, Vancouver, 2017 (Poster).
 29. **Audet, P.**, †Schaeffer, A.J., Mallyon, D., Chen, Y., Currie, C.A., & Gu, Y.J. Impact of the Canadian Shield-Cordillera tectonic transition on controlling deformation within western Canada, *AGU Fall Meeting*, San Francisco, USA, 2016 (Poster).
 30. **Audet, P.** Teleseismic receiver and transfer function modeling: Resolving plate structure in the locked zone of Cascadia, *AGU Fall Meeting*, San Francisco, USA, 2015 (Oral).
 31. **Audet, P.** Teleseismic receiver functions using OBS data: Promises and limitations from numerical modelling and examples from the Cascadia Initiative, *OBSIP Workshop*, Vancouver (WA), USA, 2015 (Poster).
 32. **Audet, P.**, & Bürgmann, R. A link between silica enrichment and the recurrence time of slow earthquakes in subduction zone forearcs, *SSA Annual Meeting*, Anchorage, USA, 2014 (Oral).
 33. **Audet, P.** The Yukon-Northwest Seismograph Network: Preliminary results of direct burial posthole installation for real-time monitoring, *SSA Annual Meeting*, Anchorage, USA, 2014 (Poster).
 34. **Audet, P.** Structural controls on subduction zone slow earthquakes, *CGU Annual Meeting*, Banff, Canada, 2014 (Poster).
 35. **Audet, P.** Seismic structure and anisotropy of the crust around major fault zones in northern California from the harmonic decomposition of receiver functions, *AGU Fall Meeting*, San Francisco, USA, 2013 (Poster).
 36. **Audet, P.**, & Schwartz, S.Y. Structural and hydrologic controls of subduction zone seismogenic behaviour along the Nicoya Peninsula, Costa Rica, *AGU Fall Meeting*, San Francisco, USA, 2012 (Poster).
 37. **Audet, P.**, & Johnson, C.L. Lithospheric and thermal structure of the Moon from gravity and topography, *AGU Fall Meeting*, San Francisco, USA, 2011 (Poster).
 38. **Audet, P.**, & Johnson, C.L. Lithospheric structure of the Moon and correlation with deep moonquake source regions, *Lunar and Planet. Sci. Conference*. The Woodlands, USA, 2011 (Poster).
 39. **Audet, P.** Spherical wavelet analysis of gravity and topography of the terrestrial planets, *AGU Fall Meeting*, San Francisco, USA, 2010 (Poster).
 40. **Audet, P.**, & Bürgmann, R. Global effective elastic thickness, mechanical anisotropy and the supercontinent cycle, *EGU General Assembly*, Vienna, Austria, 2010 (Oral).
 41. **Audet, P.** Temporal variations in crustal scattering structure near Parkfield, California, using receiver functions, *AGU Fall Meeting*, San Francisco, USA, 2009 (Poster).
 42. **Audet, P.**, Bostock, M.G., Christensen, N.I., & Peacock, S.M. The seismic signature of high pore-fluid pressure within subducting oceanic crust using receiver functions, *AGU-CGU Joint Assembly*, Toronto, Canada, 2009 (Oral).
 43. **Audet, P.**, Bostock, M.G., Mercier, J.P. & Cassidy, J.F. Mapping the northern limit of subduction in Cascadia using POLARIS broadband seismic stations, *AGU-CGU Joint Assembly*, Toronto, Canada, 2009 (Oral).
 44. **Audet, P.**, Bostock, M.G., Peacock, S.M., Christensen, N.I., Boyarko, D., Brudzinski, M.R., & Allen, R.M. Seismic evidence for overpressured subducted oceanic crust and sealing of the megathrust: Relations with ETS in Cascadia, *AGU Fall Meeting*, San Francisco, USA, 2008 (Poster).
 45. **Audet, P.**, Bostock, M.G., Cassidy, J.F., & Al-Khoubbi, I. Teleseismic imaging of Northern Cascadia upper mantle in the Explorer region, *AGU Fall Meeting*, San Francisco, USA,

- 2007 (Oral).
46. **Audet, P.**, & Bostock, M.G. Modelling teleseismic waveform distortion due to elastic heterogeneity and anisotropy using a one-way wave equation, *AGU Fall Meeting*, San Francisco, USA, 2006 (Poster).
 47. **Audet, P.**, & Mareschal, J.-C. Variations and anisotropy of the elastic thickness of the lithosphere determined by the wavelet method: Examples from the Canadian Shield, *AGU Fall Meeting*, San Francisco, USA, 2005 (Poster).
 48. **Audet, P.**, & Bostock, M.G. Teleseismic waveform modeling with a one-way wave equation, *IASPEI Meeting*, Santiago, Chile, 2005 (Poster).
 49. **Audet, P.**, & Mareschal, J.-C. Elastic thickness and mechanical anisotropy of the lithosphere: Implications for the depth scale of lithospheric deformation, *AGU Fall Meeting*, San Francisco, USA, 2004 (Poster).
 50. **Audet, P.**, & Mareschal, J.-C. Mechanical anisotropy of the lithosphere in the Canadian Shield, *AGU-CGU Joint Assembly*, Montreal, Canada, 2004 (Oral). ****AGU Outstanding Student Presentation Award****
 51. **Audet, P.**, & Mareschal, J.-C. Lithospheric density structure beneath the Canadian Shield by inversion of isostatic response function, *AGU-EGU Joint Assembly*, Nice, France, 2003 (Poster).

*Co-authored Conference Presentations (with at least one trainee, * = undergraduate author)*

1. †Esteve, C., **Audet, P.**, & Schaeffer, A.J., Seismic evidence for craton chiselling and displacement of lithospheric mantle by the Tintina Fault, northern Canadian Cordillera, *AGU Annual Meeting*, San Francisco CA, 2019.
2. †Gosselin, J.M., **Audet, P.**, †Esteve, C., †McLellan, M., †Mosher, S., & Schaeffer, A.J., Seismic evidence for megathrust fault-valve behavior during episodic tremor and slip, *AGU Annual Meeting*, San Francisco CA, 2019.
3. †McLellan, M., & **Audet, P.** Uncovering the physical controls of slow slip events using machine learning, *International Joint Workshop on Slow Earthquakes*, Tokyo, Japan, 2019 (Poster).
4. †Gosselin, J.M., **Audet, P.** & Schaeffer, A.J., Onshore/offshore shear-wave velocity structure along the west coast of British Columbia from surface-wave tomography, *SSA Annual Meeting*, Seattle WA, 2019 (Poster).
5. †McLellan, M., & **Audet, P.** Uncovering the physical controls of slow slip events using machine learning, *SSA Annual Meeting*, Seattle WA, 2019 (Poster).
6. †Mosher, S., & **Audet, P.**, Cross-correlation beamforming for simultaneous event detection and location in conjunction with logistic regression for event discrimination, *SSA Annual Meeting*, Seattle WA, 2019 (Oral).
7. †Schaeffer, A.J., & **Audet, P.**, Cairns, S., Elliott, B., Falck, H., Darbyshire, F., Bostock, M.G., & †Estève, C. New constraints on crust and mantle structure surrounding the Beaufort Sea, western Canadian Arctic, from a new broadband seismic array, *AGU Fall Meeting*, Washington DC, 2018 (Poster).
8. †Estève, C., †Schaeffer, A.J., & **Audet, P.** New image of upper mantle structure beneath western Canada from teleseismic body-wave tomography, *Yellowknife Geoscience Forum*, Yellowknife, 2018 (Oral).
9. †Schaeffer, A.J., & **Audet, P.**, Cairns, S., Elliott, B., Falck, H., Darbyshire, F., Bostock, M.G., & †Estève, C. New constraints on crust and mantle structure surrounding the Beaufort Sea, western Canadian Arctic, from a new broadband seismic array, *Yellowknife Geoscience Forum*, Yellowknife, 2018 (Poster).

10. Currie, C.A., Mallyon, D., Chen, Y., †Schaeffer, A.J., **Audet, P.**, & Gu, Y.J. Mantle dynamics and seismic structure at the boundary between the Southern Canadian Cordillera and North America Craton, *AGU Fall Meeting*, Washington DC, 2018.
11. †Estève, C., †Schaeffer, A.J., & **Audet, P.** New image of upper mantle structure beneath western Canada from teleseismic body-wave tomography, *AGU Fall Meeting*, Washington DC, 2018 (Poster)
12. †Gosselin, J.M., **Audet, P.** & †Schaeffer, A.J. Direct 2D-3D velocity structure inversion in surface-wave tomography, *AGU Fall Meeting*, Washington DC, 2018 (Oral)
13. †McLellan, M., & **Audet, P.** Uncovering the physical controls of episodic tremor and slip events using machine learning, *AGU Fall Meeting*, Washington DC, 2018 (Poster)
14. †Mosher, S., & **Audet, P.** Detecting offshore seismicity in Cascadia using logistic regression applied to sub-arrays of ocean-bottom seismographs, *AGU Fall Meeting*, Washington DC, 2018 (Poster)
15. †Dales, P., Brenguier, F., Olivier, G. & **Audet, P.** Recovery of body-wave reflections from ambient seismic noise with applications to mineral exploration, *AGU Fall Meeting*, Washington DC, 2018 (Poster)
16. †Estève, C., †Schaeffer, A.J., & **Audet, P.** Teleseismic body-wave velocity model of the Slave Craton in northwestern Canada, *CGU-SSA-CIG Joint Meeting*, Niagara Falls, 2018 (Poster).
17. †Gosselin, J., **Audet, P.**, & †Schaeffer, A.J. A two-dimensional Voronoi cell model in Bayesian inversion of surface-wave dispersion: Application to the Cascadia forearc, *CGU-SSA-CIG Joint Meeting*, Niagara Falls, 2018 (Poster).
18. †Schaeffer, A.J., & **Audet, P.** Fluid pressure and shear zone development over the locked to slow slip region in Cascadia, *CGU-SSA-CIG Joint Meeting*, Niagara Falls, 2018 (Oral).
19. †Gaudreau, E., **Audet, P.**, & Schneider, D.A. Wavelet analysis of magnetic anomaly data: constraining thermal structure of western Canadian lithosphere, *EGU Annual Meeting*, Vienna, Austria, 2018 (Oral).
20. †Schaeffer, A.J., Lebedev, S., **Audet, P.**, Fullea, J., & Gaina, C. Seismic and thermal lithospheric structure of the North American-Greenland Arctic realm, *EGU Annual Meeting*, Vienna, Austria, 2018 (Poster).
21. †Schaeffer, A.J., & **Audet, P.** Fluid pressure and shear zone development over the locked to slow slip region in Cascadia, *EGU Annual Meeting*, Vienna, Austria, 2018 (Oral).
22. †Dales, P., Olivier, G., & **Audet, P.** Imaging near surface mineral targets with ambient seismic noise, *AGU Fall Meeting*, New Orleans, 2017 (Oral).
23. †Estève, C., †Schaeffer, A.J., & **Audet, P.** New constraints on upper mantle structure underlying the diamondiferous central Slave Craton, Canada, from teleseismic data, *AGU Fall Meeting*, New Orleans, 2017 (Poster).
24. †Gaudreau, E., **Audet, P.**, & Schneider, D.A. Mapping Curie depth in western Canada from a wavelet analysis of magnetic anomaly data, *AGU Fall Meeting*, New Orleans, 2017 (Poster).
25. †Gosselin, J.M., **Audet, P.**, & †Schaeffer, A.J. Seismic velocity structure of the forearc in northern Cascadia from Bayesian inversion of teleseismic data, *AGU Fall Meeting*, New Orleans, 2017 (Poster).
26. †Mosher, S., & **Audet, P.** Classifying seismic noise and sources from OBS data using unsupervised machine learning, *AGU Fall Meeting*, New Orleans, 2017 (Poster).
27. †Schaeffer, A.J., & **Audet, P.** Structure of the Cascadia subduction zone imaged using surface wave tomography, *AGU Fall Meeting*, New Orleans, 2017 (Poster).
28. Chen, Y., Gu, Y.J., Currie, C., Johnston, S.T., Hung, S.-H., †Schaeffer, A.J., & **Audet, P.** Seismic evidence for mantle suture and collisional origin for the Canadian Cordillera, *AGU*

- Fall Meeting, New Orleans, 2017 (Oral).*
29. Currie, C.A., *Mackay-Hill, A., **Audet, P.**, & †Schaeffer, A.J. Cordilleran longevity, elevation and heat driven by lithospheric mantle removal, *AGU Fall Meeting, New Orleans, 2017 (Poster)*.
 30. Mazzotti, S., †Tarayoun, A., Marechal, A., & **Audet, P.** Role of the Yakutat collision and upper mantle dynamics in the present-day tectonics of the North American Northern Cordillera, *AGU Fall Meeting, New Orleans, 2017 (Oral)*, INVITED.
 31. Currie, C.A., †Schaeffer, A.J., Mallyon, D., Chen, Y., Gu, Y.J., & **Audet, P.** The 4D structure of the Cordillera-Craton transition in western Canada, *GSA Annual Meeting, Seattle, 2017 (Oral)*.
 32. †Schaeffer, A.J., Lebedev, S., Fullea, J., & **Audet, P.**, Investigating the seismic and thermal structure of the circum-Arctic lithosphere and asthenosphere, *GSA Annual Meeting, Seattle, 2017 (Oral)*, INVITED
 33. †Mosher, S., & **Audet, P.**, Unsupervised machine learning clustering applied to OBS data, *OBSIP workshop, Portland (ME), 2017 (Poster)*.
 34. †Gaudreau, E., Schneider, D.A., Ryan, J., & **Audet, P.** Crustal-scale tectonism of the Yukon-Tanana Terrane, northern Canadian Cordillera: Constraints from zircon and apatite thermochronology, *GAC-MAC Annual Meeting, Kingston, 2017 (Oral)*.
 35. †Estève, C., †Schaeffer, A.J., **Audet, P.**, *Murray-Bergquist, L., Cairns, S., Elliott, B., Falck, H., & Snyder, D. A preliminary teleseismic investigation of the crust and mantle lithosphere obtained from BISN in the western Canadian Arctic, *CGU Annual Meeting, Vancouver, 2017 (Poster)*.
 36. Chen, Y., Gu, Y.J., Currie, C., Hung, S.-H., †Schaeffer, A.J., & **Audet, P.** Strong latitudinal variation in Cordillera-Craton boundary transition in southwestern Canada, *CGU Annual Meeting, Vancouver, 2017 (Oral)*.
 37. †Schaeffer, A.J., **Audet, P.**, Mallyon, D., Currie, C., & Gu, J. Transient tectonic transition from the Canadian Cordillera to stable Shield?, *CGU Annual Meeting, Vancouver, 2017 (Oral)*.
 38. †Schaeffer, A.J., Lebedev, S., Fullea, J., & **Audet, P.** Seismic tomography of the Circum-Arctic lithosphere and asthenosphere, *CGU Annual Meeting, Vancouver, 2017 (Oral)*.
 39. †Gaudreau, E., Schneider, D.A., & **Audet, P.** Cretaceous exhumation of the Yukon-Tanana Terrane, northern Canadian Cordillera: insight from low-temperature (U-Th)/He thermochronology, *Cordilleran Tectonics Workshop, Vancouver, 2017 (Poster)*
 40. †Reynen, A., & **Audet, P.** Improving intelligence of seismic data assimilation using machine learning, *SSA Annual Meeting, Denver, USA, 2017 (Poster)*
 41. †Dales, P., **Audet, P.**, & Olivier, G. A novel seismic source detection and location algorithm implemented to improve the construction of seismic Green's functions from ambient noise in mines, *AGU Fall Meeting, San Francisco, USA, 2016 (Poster)*
 42. †McLellan M., †Tarayoun, A., *Sole, C., †Schaeffer, A.J., & **Audet, P.** Structure and deformation of the northern Canadian Cordillera: A broadband seismic reconnaissance study, *AGU Fall Meeting, San Francisco, USA, 2016 (Poster)*
 43. Milne, G., Latychev, K., †Schaeffer, A.J., **Audet, P.**, & Tarasov, L. The influence of lateral Earth structure on glacial isostatic adjustment model output: Sensitivity to seismic model input, *AGU Fall Meeting, San Francisco, USA, 2016 (Poster)*
 44. †Schaeffer, A.J., **Audet, P.**, & Lebedev, S. Architecture of the North American lithospheric mantle and its relationship to ultramafic magmatism, *AGU Fall Meeting, San Francisco, USA, 2016 (Poster)*
 45. Snyder, D., Cairns, S., Elliott, B., †Schaeffer, A.J., **Audet, P.**, †Esteve, C., *Murray-Bergquist, L., & Falck, H. A preliminary teleseismic investigation of the crust and mantle

- lithosphere obtained from BISN in the western Canadian Arctic, *AGU Fall Meeting*, San Francisco, USA, 2016 (Poster)
46. †Dales, P., **Audet, P.**, & Olivier, G. Novel interferometric methods for seismic monitoring in mines, *Quebec Mines*, Quebec City, Canada, 2016 (Oral) ****INVITED****
 47. †Dales, P., **Audet, P.**, & Mercier, J.-P. Ambient noise seismic interferometry in deep mine environments, *Institute for Mine Seismology*, Hobart, Australia, 2016 (Oral)
 48. *Sole, C., **Audet, P.**, & †Schaeffer, A.J. Upper mantle seismic anisotropy in the northern Canadian Cordillera from teleseismic shear-wave splitting analysis, *GAC-MAC Annual Meeting*, Whitehorse, YK, Canada, 2016 (Poster)
 49. †Mosher, S., & **Audet, P.** Seismic interferometry based tomographic imaging of the San Andreas Fault near Parkfield, CA, *GAC-MAC Annual Meeting*, Whitehorse, YK, Canada, 2016 (Oral)
 50. †Tarayoun, A., **Audet, P.**, †Ashoori, A., & Mazzotti, S. Architecture of the crust and upper mantle in the northern Canadian Cordillera from teleseismic receiver functions, *GAC-MAC Annual Meeting*, Whitehorse, YK, Canada, 2016 (Oral)
 51. †McLellan, M., †Schaeffer, A.J., & **Audet, P.** Structure and Deformation of the northwestern Canadian Cordillera: Insights from Rayleigh-wave tomography, *GAC-MAC Annual Meeting*, Whitehorse, YK, Canada, 2016 (Oral) ****GAC Geophysics Best Student Paper Award****
 52. †Schaeffer, A.J., & **Audet, P.** Nature of the Canadian Shield-Cordillera tectonic transition and its role in controlling deformation within western North America, *GAC-MAC Annual Meeting*, Whitehorse, YK, Canada, 2016 (Oral)
 53. †Cossette, E., Schneider, D.A., **Audet, P.**, & Grassman, B. Crustal seismic anisotropy and structure from textural and seismic investigations in the Cycladic region, Greece, *EGU Annual Meeting*, Vienna, Austria, 2016 (Poster)
 54. †Schaeffer, A.J., & **Audet, P.** Resolving the tectonic transition between ancestral North America and the northern Cordillera, *AGU Fall Meeting*, San Francisco, USA, 2015. (Oral)
 55. †Dales, P., **Audet, P.**, Mercier, J.P., Pascu, A., & de Beer, W. Stress monitoring potential of ambient noise interferometry in deep mine environments, *AGU Fall Meeting*, San Francisco, USA, 2015. (Poster)
 56. †McLellan, M., †Schaeffer, A.J., & **Audet, P.** Rayleigh-wave tomography study of northwestern Canada, *AGU Fall Meeting*, San Francisco, USA, 2015. (Poster)
 57. †Mosher, S., & **Audet, P.** Body-wave scattering from seismic interferometry: Preliminary results from the San Andreas Fault near Parkfield, California, *AGU Fall Meeting*, San Francisco, USA, 2015. (Poster)
 58. †Ashoori, A., & **Audet, P.** Lithospheric structure across the northern Canadian cordillera from teleseismic receiver functions, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Oral)
 59. †Cossette, E., **Audet, P.**, Schneider, D.A., Graseman, B., & Habler, G. Seismic properties from EBSD data and receiver function analyses: results from a crustal-scale detachment system, Aegean region, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Oral)
 60. †Tarayoun, A., **Audet, P.**, & Mazzotti, S. Probing the “orogenic float” model using teleseismic receiver functions in the northern Canadian Cordillera, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)
 61. *Gaston-Faubert, S., & **Audet, P.**, Automatic detection and location of regional earthquakes: Toward improving the earthquake catalogue in the northern Canadian Cordillera, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)
 62. †McLellan, M., & **Audet, P.**, Ambient-noise tomography study of northwestern Canada: Preliminary results, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)

63. †Mosher, S., & **Audet, P.** Body-wave scattering from seismic interferometry: Preliminary results from the San Andreas Fault near Parkfield, California, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)
64. †Dales, P., **Audet, P.**, Mercier, J.P., Pascu, A., & de Beer, W. Real-time stress monitoring using ambient-noise tomography in deep mine environments, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)
65. *Plourde, A., Bostock, M.G., & **Audet, P.**, Low-frequency earthquakes in southern Cascadia, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Poster)
66. Mercier, J.P., Pascu, A., †Dales, P., de Beer, W., & **Audet, P.** Processing a large amount of seismic (geophysical?) data using Hadoop, *AGU-CGU Joint Assembly*, Montreal, Canada, 2015. (Oral)
67. *Mosher, S., **Audet, P.**, & L'Heureux, I. Mantle flow around northernmost Cascadia from seismic anisotropy, *CGU Annual Meeting*, Banff, Canada, 2014. (Poster)
68. Thomas, A., *Plourde, A., **Audet, P.**, & Bostock, M.G. Low-frequency earthquakes in central and southern Cascadia, *AGU Fall Meeting*, San Francisco, USA, 2014. (Poster)
69. †Cossette, E., Schneider, D.A., **Audet, P.**, Habler, G., & Graseman, B. Modeling the seismic response of the crust, western Cyclades, Greece, *GSA Annual Meeting*, Denver, USA, 2013. (Poster)
70. Jellinek, A.M., **Audet, P.**, & *Uno, H. The anisotropic signature of western Canada: Probing the mechanics of lithospheric deformation, *AGU Fall Meeting*, San Francisco, USA, 2007. (Oral)
71. *Uno, H., **Audet, P.**, & Jellinek, A.M. Elastic thickness structure and anisotropy in western Canada from multitaper and wavelet coherence methods: Implications for lithospheric deformation, *AGU Fall Meeting*, San Francisco, USA, 2006. (Oral)

Outreach

Judge for the Undergraduate Science Case competition, 2017

Keynote at the Undergraduate Research Opportunity Program workshop, 2017

Public Lecture, Faculty of Science Alumni Reception, University of Ottawa, 2015

Media Relations

Press releases:

- University of Ottawa, *Young Earth Sciences researcher wins major fellowship*, 2015
- University of Ottawa, *Human-induced groundwater depletion may cause earthquakes*, 2014 (picked up by *Associated Press*, *Science News*, *The New Yorker*, *LA Times*, *SF Chronicle*, *The Globe and Mail*, *Earth Magazine*, *Huffington Post*, and several others; Total of >150 stories in mainstream media)
- University of British Columbia, *Trapped water cause of regular tremors under Vancouver Island*, 2009 (picked up by *Canadian Press*, *The Globe and Mail*, *CanWest News Wire*; Total of >15 stories in mainstream media)

Television and radio appearances:

- *Le Bulletin de 18h00*, TVA Gatineau, 2017
- *Bernier et Cie (live)*, Radio-Canada Ottawa-Gatineau, 2015
- *Entre nous (live)*, Rogers TV Ottawa, 2015
- *L'heure de pointe (live)*, Radio-Canada Toronto, 2015
- *Infos*, Unique FM (x2), 2015

- *Les Samedis du Monde*, Radio-Canada Ouest, 2014
- *Weekend Morning News (live)*, CKNW Victoria, 2014
- *All Points West (live)*, CBC Radio 1 Victoria, 2014
- *Les voies du retour (live)*, Radio-Canada Ottawa-Gatineau, 2014
- *News at Noon (live)*, CTV Ottawa, 2013
- *Le Téléjournal*, Radio-Canada Montreal, 2012
- *Le Radiojournal*, Radio-Canada Montreal, 2012

Newspaper, Magazine, Web and Blog interviews:

- Interview on *Science Advances* article, 2016
- Interviews on Sloan Fellowship: *Le Droit*; *Le Devoir*; *Fulcrum*, 2015
- Blog post, *waterunderground.org*, 2014
- Blog interview, *monglobeblog.wordpress.com*, 2014
- Interviews on *Nature* paper (Audet and Bürgmann, 2014): *Science Media Centre of Canada*; *CBC News*; *Global News*; *Postmedia News (Ottawa Citizen, National Post, Vancouver Sun, Edmonton Journal, The Province, etc.)*; *Times Colonist*; *Metro Victoria*; *Live Science*, 2014
- Interviews on *Nature* paper (Amos et al., 2014): *Science Media Centre of Canada*; *La Recherche*; *Notre-planète.info*; *Ouest-France*; *Environmental Monitor*; *Black Locks*; *Postmedia News*, 2014
- Blog interview, *Geosphere*, 2013
- Interview on *Nature* paper (Audet et al., 2009): *Earth Magazine*, 2009