

PASCAL AUDET

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RESEARCH INTERESTS

Geophysics; Seismology; Planetary Geophysics; Plate tectonics; Reology of the lithosphere; Plate boundary fault structure

EMPLOYMENT

Sept 2011 - Assistant Professor, University of Ottawa
2008 - 2011 Miller Research Fellow (postdoc), University of California Berkeley

EDUCATION

2005 - 2008 Ph.D Geophysics, University of British Columbia
2002 - 2004 M.Sc Earth Sciences, Université du Québec à Montréal
1999 - 2002 B.Sc Physics, Université de Montréal

SCHOLARSHIPS & AWARDS

2008 - 2011 Miller Research Fellowship (UC Berkeley)
2008 - 2010 NSERC Postdoctoral Fellowship (declined)
2007 - 2008 Cordula & Gunter Paetzold Graduate Fellowship (UBC)
2007 FQRNT - Postgraduate Research Scholarship
2005 - 2007 NSERC - Postgraduate Research Scholarship PGS-B
2004 AGU - Outstanding Student Paper Award in Tectonophysics
2002 - 2004 NSERC - Postgraduate Research Scholarship PGS-A
2000 & 2001 NSERC - Undergraduate Student Research Awards (2)

EXPERIENCE

Field work

2009 Field assistant, Mendocino Seismic Experiment, USArray deployment
2005 - 2007 Deployment and maintenance of portable seismic stations, Northern Vancouver Island BC-POLARIS Array
2005 Field assistant, IRIS-PASSCAL CANOE seismic Experiment

Student Advising

2005 - 2006 Hideharu Uno, Undergraduate Honours thesis (UBC)

PROFESSIONAL ACTIVITIES

Reviewer	Nature Geoscience, Canadian Journal of Earth Sciences (3), Computers & Geosciences, Earth and Planetary Science Letters (3), Geology (2), Geophysical Journal International (2), Geophysical Research Letters (2), Geophysics, Journal of Geophysical Research, Physics of the Earth and Planetary Interiors (3), National Science Foundation (6)
Member	American Geophysical Union, Canadian Geophysical Union, Seismological Society of America
Convener	Tectonophysics special session at AGU/CGU Joint Spring Meeting, 2009 Solid Earth special session at CGU Annual Meeting, 2008 Tectonophysics special session at AGU Fall Meeting, 2007

INVITED TALKS

Apr 2011	University of California, Santa Cruz
Feb 2011	University of California, Davis
Nov 2010	University of Oregon, Eugene
Nov 2010	University of Ottawa
Oct 2010	University of Texas Institute of Geophysics, Austin
Oct 2010	Cascadia Initiative Workshop, Portland
Mar 2010	University of California, Berkeley
Nov 2009	Carnegie Institution of Washington, DC
May 2009	AGU/CGU Annual Spring Meeting, Toronto
May 2009	University of California, Santa Cruz
Apr 2009	California Institute of Technology, Pasadena
Mar 2009	United States Geological Survey, Menlo Park
Feb 2009	McGill University, Montreal
Jan 2009	GEOTOP Research Center, Montreal
Nov 2008	University of California, Berkeley
May 2008	Geological Survey of Canada, Pacific Geoscience Center
Feb 2007	Geological Survey of Canada, Pacific Geoscience Center

PUBLICATIONS

Audet, P., 2011, Seismic imaging of the San Andreas fault in northern California using receiver functions, in preparation.

Audet, P., and C. L. Johnson, 2011, Lithospheric and thermal structure of the Moon from gravity and topography, in preparation.

14 Peacock, S.M., N.I. Christensen, M.G. Bostock, and **P. Audet**, 2011, High pore pressures and porosity at 35 km depth in the Cascadia subduction zone, *Geology*, 39, 471-474, doi:10.1130/G31649.1.

13 R. Bürgmann, and **P. Audet**, 2011, Continental jelly, *Nature*, 471, 312-313 (News & Views).

- 12 **Audet, P.**, and R. Bürgmann, 2011, Dominant role of tectonic inheritance in supercontinent cycles, *Nature Geosci.*, *4*, 184-187, doi:10.1038/ngeo01080.
- 11 **Audet, P.**, 2011, Directional wavelet analysis on the sphere: Application to gravity and topography of the terrestrial planets, *J. Geophys. Res. - Planets*, *116*, E01003, doi:10.1029/JE003710.
- 10 **Audet, P.**, 2010, Temporal variations in crustal scattering structure near Parkfield, California, using receiver functions, *Bull. Seism. Soc. Am.*, *100*, 1356-1362, doi:10.1785/0120090299.
- 9 **Audet, P.**, M.G. Bostock, D.C. Boyarko, M.R. Brudzinski, and R.M. Allen, 2010, Slab morphology in the Cascadia forearc and its relation to episodic tremor and slip, in press, *J. Geophys. Res.*, *115*, B00A16, doi:10.1029/2008JB006053.
- 8 **Audet, P.**, M.G. Bostock, N.I. Christensen, and S.M. Peacock, 2009, Seismic evidence for overpressured subducted oceanic crust and megathrust fault sealing, *Nature*, *457*, 76-78, doi:10.1038/nature07650.
- 7 **Audet, P.**, M.G. Bostock, J.-P. Mercier, and J.F. Cassidy, 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, doi:10.1130/G25356A.
- 6 Mercier, J.-P., M.G. Bostock, **P. Audet**, J.B. Gaherty, E. Garnero, and J. Revenaugh, 2008, The teleseismic signature of fossil subduction: Northwestern Canada, *J. Geophys. Res.*, *113*, B04308, doi:10.1029/2007JB005127.
- 5 **Audet, P.**, M.G. Bostock, and J.-P. Mercier, 2007, Teleseismic waveform modelling with a one-way wave equation, *Geophys. J. Int.*, *171*, 1212-1225, doi:10.1111/j.1365-246X.2007.03586.x.
- 4 **Audet, P.**, A.M. Jellinek, and H. Uno, 2007, Mechanical controls on the deformation of continents at convergent margins, *Earth Planet. Sci. Lett.*, *264*, 155-166, doi:10.1016/j.epsl.2007.09.024.
- 3 **Audet, P.**, and J-C. Mareschal, 2007, Wavelet analysis of the coherence between Bouguer gravity and topography: Application to the elastic thickness anisotropy in the Canadian Shield, *Geophys. J. Int.*, *168*, 287-298, doi:10.1111/.1365-246X.2006.03231.x.
- 2 **Audet, P.**, and J-C. Mareschal, 2004, Anisotropy of the flexural response of the lithosphere in the Canadian Shield, *Geophys. Res. Lett.*, *31*, L20601, doi:10.1029/2004GL021080.
- 1 **Audet, P.**, and J-C. Mareschal, 2004, Variations in elastic thickness in the Canadian Shield, *Earth Planet. Sci. Lett.*, *226*, 17-31, doi:10.1016/j.epsl.2004.07.035.