

## James William LaBelle

### Address

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Dartmouth College  
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### Date and Place of Birth

June 21, 1958          Denver, Colorado (*U.S. citizen*)

### Education

June, 1980              B.S., Physics, Stanford University  
August, 1982            M.S., Applied Physics, Cornell University  
August, 1985            Ph.D., Applied Physics, Cornell University

### Career Summary

Jul 2001-present      Professor, Department of Physics and Astronomy,  
Dartmouth College, Hanover, New Hampshire  
(Department Chair, 2013-present)

Jul 1995-Jun 2001      Associate Professor,  
Department of Physics and Astronomy,  
Dartmouth College, Hanover, New Hampshire

Sep 1989-Jun 1995      Assistant Professor,  
Department of Physics and Astronomy,  
Dartmouth College, Hanover, New Hampshire

Dec 1987-Sep 1989      Research Associate,  
Center for Atmospheric and Space Science,  
Utah State University, Logan, Utah

Nov 1985-Nov 1987      Postdoctoral Associate, Max-Planck Institute  
for Extraterrestrial Physics, Garching, Germany

May 1985-Nov 1985      Postdoctoral Associate, Cornell University,  
Ithaca, New York

### Professional Societies

American Geophysical Union  
International Union of Radio Science, Commission H

### Awards and Fellowships

McMullen Fellowship for Graduate Study, 1980-1981  
Presidential Young Investigator Award, 1990-1995  
Dartmouth Junior Faculty Fellowship, Spring 1993  
University of Sydney International Visiting Research Fellowship, 2008  
Lois L. Rodgers Professorship, Dartmouth College, 2010-present

### Graduate Students Supervised

E. Gewirtz (M.Eng., 1992), A. Yue(M.S., 1993), A.T. Weatherwax (PhD, 1994),  
E.J. Lund (PhD, 1995), D. Ruppert (M.S., 1995), J.M. Jahn (PhD, 1997),  
S.G. Shepherd (PhD, 1998), K.L. McAdams (PhD, 1999),  
J. Clapper (M.S., 1999), J.M. Hughes (PhD, 2000), M. Samara (PhD, 2005),  
S. Ye (PhD, 2007), C. Colpitts (PhD, 2009), N. Bunch (PhD, 2010)  
X. Yan (M.S., 2013), M. Broughton (PhD, 2014), M. Dombrowski, S. Hatch, H. Kim

J. LABELLE — PUBLICATIONS

1. Carpenter, D.L., and J.W. LaBelle, A study of whistlers correlated with bursts of electron precipitation near L=2, *J. Geophys. Res.*, 89, 2955, 1982.
2. Kintner, P.M., J. LaBelle, M.C. Kelley, L.J. Cahill, T. Moore, and R. Arnoldy, Interferometric phase velocity measurements, *Geophys. Res. Lett.*, 11, 19, 1984.
3. LaBelle, J., Mapping of electric field structures from the equatorial ionosphere to the underlying E-region, *J. Geophys. Res.*, 90, 4341, 1985.
4. Baker, K.D., J. LaBelle, R.F. Pfaff, L.C. Howlett, N.B. Rao, J.C. Ulwick, and M.C. Kelley, Absolute electron density measurements in the equatorial ionosphere, *J. Atmos. Terr. Phys.*, 47, 781, 1985.
5. Whalen, B.A., A.W. Yau, F. Creutzberg, D.D. Wallis, A.G. McNamara, F.R. Harris, M.B. Pongratz, P.A. Bernhardt, P.M. Kintner, J. LaBelle, W.R. Sheldon, J.R. Benbrook, E.A. Bering, P.A. Forsyth, and R.A. Koehler, Waterhole auroral arc modification experiments: electrodynamic response, *J. Geophys. Res.*, 90, 8377, 1985.
6. LaBelle, J., Ionospheric turbulence: case studies in equatorial spread F and development of a rocket-borne interferometer, PhD. Thesis, Cornell University, 1985.
7. LaBelle, J., P.M. Kintner, A.W. Yau, and B.A. Whalen, Large amplitude wave packets observed in the ionosphere in association with transverse ion acceleration, *J. Geophys. Res.*, 91, 7113, 1986.
8. LaBelle, J., P.M. Kintner, and M.C. Kelley, Interferometric phase velocity measurements in the auroral electrojet, *Planet. Space Sci.*, 34, 1285, 1986.
9. LaBelle, J., and M.C. Kelley, The generation of kilometer scale irregularities in equatorial spread F, *J. Geophys. Res.*, 91, 5504, 1986.
10. LaBelle, J., M.C. Kelley, and C.E. Seyler, An analysis of the role of drift waves in equatorial spread F, *J. Geophys. Res.*, 91, 5513, 1986.
11. Kelley, M.C., J. LaBelle, E. Kudeki, B.G. Fejer, Sa. Basu, Su. Basu, K.D. Baker, C. Hanuise, P. Argo, R.F. Woodman, W.E. Swartz, D.T. Farley, and J.W. Meriwether, The CONDOR equatorial spread F experiment: an overview, *J. Geophys. Res.*, 91, 5487, 1986.
12. Basu, Sa., Su. Basu, J. LaBelle, E. Kudeki, B.G. Fejer, M.C. Kelley, and H.E. Whitney, Gigahertz scintillations and spaced receiver drift measurements during the project CONDOR equatorial spread F campaign in Peru, *J. Geophys. Res.*, 91, 5526, 1986.
13. Kintner, P.M., J. LaBelle, W. Scales, A.W. Yau, and B.A. Whalen, Observations of plasma waves within regions of perpendicular ion acceleration, *Geophys. Res. Lett.*, 13, 1113, 1986.
14. Kintner, P.M., J. LaBelle, W. Scales, R. Erlandson, and L.J. Cahill, A comparison of plasma waves produced by ion accelerators in the F-region ionosphere, in *Ion Acceleration in the Magnetosphere and Ionosphere*, Geophysical Monograph 38, AGU, p. 206, 1986.
15. Treumann, R.A., O.H. Bauer, J. LaBelle, G. Haerendel, P.J. Christiansen, A.G. Darbyshire, A.J. Norris, L.C.J. Woolliscroft, R.R. Anderson, D.A. Gurnett, R.W. Holzworth, H.C. Koons, and J. Roeder, Electron Plasma waves in the solar wind: AMPTE/IRM and UKS observations, *Adv. Space Res.*, 6, 353, 1986.
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17. Baumjohann, W., N. Sckopke, J. LaBelle, B. Klecker, H. Lühr, and K.H. Glassmeier, Plasma and field observations of a compressional Pc5 wave event, *J. Geophys. Res.*, *92*, 12203, 1987.
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20. LaBelle, J., Are Fast Atmospheric Pulsations optical signatures of Lightning-induced Electron Precipitation?, *Geophys. Res. Lett.*, *15*, 277, 1988.
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23. LaBelle, J., and R.A. Treumann, Plasma waves at the dayside magnetopause, *Space Sci. Rev.*, *47*, 175, 1988.
24. LaBelle, J., and G. Paschmann, Motions of the ring current inner edge inferred from plasma measurements, *J. Geophys. Res.*, *94*, 485, 1989.
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26. LaBelle, J., Radio Noise of Auroral Origin: 1968-1988, *J. Atmos. Terr. Phys.*, *51*, 197, 1989.
27. Baumjohann, W., R.A. Treumann, J. LaBelle, and R.R. Anderson, Average electric wave power across the plasma sheet and its relation to ion bulk speed, *J. Geophys. Res.*, *94*, 15221, 1989.
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38. Treumann, R.A., J. LaBelle, G. Haerendel, and R. Pottelette, Plasma diffusion and the magnetopause boundary layer, *IEEE Trans. Plasma Sci.*, *20*, 1–10, 1992.
39. LaBelle, J., and A.T. Weatherwax, Ground-based observations of LF/MF/HF radio waves of auroral origin, *Proceedings of the 1992 Cambridge Workshop in Geoplasma Physics*, T. Chang, editor, Scientific Publishers, Cambridge, Mass., p. 223, 1993.
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59. Jahn, J.M., J. LaBelle, and R.F. Pfaff, Electric field measurements from the Brazil/Guará spread F rocket, *Geophys. Res. Lett.*, *24*, 1695, 1997.
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65. Shepherd, S.G., J. LaBelle, and M.L. Trimpi, The polarization of auroral roar emissions, *Geophys. Res. Lett.*, *24*, 3161, 1997.
66. LaBelle, J., Review of recent ground-level observations of terrestrial auroral radio emissions, *Planet. Radio Emissions IV*, ed. by H.O. Rucker, et al., Austrian Acad. Sci. Press, p. 283, 1997.
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