

Curriculum Vitae: Guy Vandegrift, Ph. D.

Assistant Professor of Physics, Wright State University Lake Campus

A.B. (Physics) 1974, University of California at Berkeley (Sep 1970 - Jun 1974)

Ph.D. (Physics) 1982, University of California at Berkeley (Sep 1976 - Jun 1982)

Interests: Plasma Physics, Musical Acoustics, Classical and Quantum Mechanics, Relativity, Boatbuilding.

Previous Positions:

Physics Lecturer, University of North Carolina, Greensboro, August 1991 – June 1995

Assistant Professor of Physics, University of Texas at El Paso August 1995 – June 1999

Assistant Professor of Physics, Purdue University North Central August 1999 – Spring 2006

Visiting Professor of Mathematics, Valparaiso University August 2006 – August 2007.

Professor of Physics, Wright State University Lake Campus August 2007 –present.

Publications:

1. Vandegrift, G. 2008. "[The River Needs a Cork](#)", The Physics Teacher 46 (7):440
2. Vandegrift, G. 2004. "[The diffraction and spreading of a wavepacket](#)". American Journal of Physics 72 (3): 404-407.
3. Bohan, R and Vandegrift, G, 2003. "[Temperature-Driven Convection](#)". The Physics Teacher 41 (2): 76-77.
4. Vandegrift, G. 2002. "[The maze of quantum mechanics](#)". European Journal of Physics 23 (5): 513-522.
5. Vandegrift, G. 2000. "[Accelerating wavepacket solution to Schrodinger's equation subject to a uniform force](#)". American Journal of Physics 68 (26): 576-567.
6. Vandegrift, G., and Fultz, B. 1998. "[The Mossbauer Effect Explained](#)". American Journal of Physics 66 (7): 593-596.
7. Vandegrift, G. 1997. "[Transverse bending waves and the breaking broomstick demonstration](#)". American Journal of Physics 65 (6): 505-510.
8. Vandegrift, G., and Wall, E. 1997. "[The spatial inhomogeneity of pressure inside a violin at main air resonance](#)". Journal of the Acoustical Society of America 102 (1) 622-627.
9. Vandegrift, G. 1995. "[Bell's Theorem and Psychic Phenomena](#)". Philosophical Quarterly 45 (181): 471-476. Reprinted in Theodore Schick, Jr., (editor) 1999: Readings in the Philosophy of Science: From Positivism to Postmodernism. Mountainview, CA: Mayfield Co [Note: Professor Yang of Grossmont College recently devoted an entire week of Philosophy_155 to this paper!]
10. Vandegrift, G.. 1995. "[On the derivation of Coriolis and other noninertial accelerations](#)". American Journal of Physics 63(7): 663.
11. Vandegrift, G. 1994. "[Why Bach Sounds Funny on the Piano](#)". American String Teacher (Fall 1994) 44(4): 12-18.
12. Vandegrift, G.. 1993. "[Experimental investigation of the Helmholtz resonance of a Violin](#)", American Journal of Physics 61 (5): 415-421.
13. Vandegrift, G. 1993. "[A simple derivation of the Green's function for a rectangular Helmholtz resonator at low frequency](#)", Journal of the Acoustical Society of America 94 (1): 574-575.
14. Vandegrift, G. 1993. "[Deducing the width of a Lorentzian resonance curve from experimental data](#)", American Journal of Physics. 61 (5): 473-474.
15. Vandegrift, G., Donahue, K., and Velat, D. 1991. "[A plasma source for mirror physics simulation experiments](#)" Review of Scientific Instruments 62 (4): 2414-2421.
16. Vandegrift, G., and Loomis, R. 1990. "[An end loss analyzer for plasma diagnosis](#)" Review of Scientific Instruments 62 (5): 1369-1369.
17. Vandegrift, G.. 1989. "[Line-tying of Interchange Modes in a Nearly Collisionless Mirror Trapped Plasma](#)" Physics of Fluids B 1 (12): 2414-2421.
18. Vandegrift, G., Baker, T., Digrazio, J., Dohne, A., Flori, A., Loomis, R., Steel, C, and, Velat, D. 1989. "[Wave Cutoff on a Suspended Slinky](#)", American Journal of Physics 57 (10): 949-950.
19. Bekhtenev, A. A., Vandegrift, G. G., and, Volosov, V. I. 1988. "The [Modulation in the Parallel Current in an Open Magnetic Trap Experiencing Potential Fluctuations in the Plasma](#)", Fizika Plasmy 14(3): 292-300. [in Russian; translated to English in Soviet Journal of Plasma Physics (1988) 14 (3) pp. 168-173.]
20. Vandegrift, G., and Good, T. 1986. "[Partial Line-tying of the Flute Mode in a Magnetic Mirror](#)", Physics of Fluids 29 (2): 550-555.
21. Wickham, M, and Vandegrift, G. 1982. "[Curvature Induced Interchange Mode in an Axisymmetric Plasma](#)", Physics of Fluids 25 (1): 52-58.