

# BIOGRAPHICAL SKETCH / BRIEF CURRICULUM VITA

## JOHN J. SMETANKA, PH.D.

### *EDUCATION*

Carnegie Mellon University    Physics    B.S. 1989  
University of Chicago    Astronomy and Astrophysics    M.S. 1991; Ph. D. 1997

### *PROFESSIONAL POSITIONS*

2008 – present Vice President for Academic Affairs and Academic Dean, Saint Vincent College,  
Latrobe, PA

2010-2011    Interim Dean, Herbert W. Boyer School of Natural Sciences, Mathematics, and  
Computing, Saint Vincent College, Latrobe, PA

2008    Director of the Liberal Arts Program, Saint Vincent College, Latrobe, PA

2003 – present Director of the Honors Program, Saint Vincent College, Latrobe, PA

2004    Acting Chairperson, Department of Physics, Saint Vincent College, Latrobe, PA

1997 – present Assistant Professor, Department of Physics, Saint Vincent College, Latrobe, PA

1994 – 1995    Adjunct Professor, Department of Physics, Saint Vincent College, Latrobe, PA

1993 – 1997    Vice President of Research and Development, Chief Technical Officer, On Target  
Mapping, Pittsburgh, PA

### *PUBLICATIONS AND MAJOR PRESENTATIONS*

Hipps, N. and **Smetanka J. J.** (2010), “Teacher Fellows: A Sabbatical Program for School District Teachers at a Small Liberal Arts College”, presented at the 2010 Math and Science Partnership Learning Network, Washington, D. C., January 2010.

M. A. Maize and **J. J. Smetanka** (2008), “The Electric Polarizability of a Particle in a Double Delta Potential”, *The European Journal of Physics*, v29 n3 p497-506 May 2008.

**Smetanka, J. J.** (2008), “Women in Physics: Cause and Effect”, invited talk at the *Civitas Forum*, Saint Vincent College, October 2008.

**Smetanka, J. J.** and Hipps, N. (2006) “Changes in Undergraduate Teaching and Learning within the MSP-SWPA”, presentation at the AAPT National Meeting, Anchorage, AK, January 2006.

**Smetanka, J. J.** (2006) “Student Projects Evaluating Emerging Technologies as Solutions for Environmental Problems”, invited talk at the AAPT National Meeting, Anchorage, AK, January 2006.

**Smetanka, J. J.** (2003) “Promoting General Science Education through Civic Engagement”, presentation at the AAPT Western Section Meeting, October 2003.

**Smetanka, J. J.** (2000) “The Spectroscopic Properties of Star-forming Galaxies at Intermediate Redshift”, *Bulletin of the American Astronomical Society*, Vol. 32, p. 756.

Elwell, R., **Smetanka, J. J.**, “A Celestial Navigation Lesson for Middle School Science Students”, American Astronomical Society, 197th AAS Meeting, #54.11; *Bulletin of the American Astronomical Society*, Vol. 32, p.1494.

**Smetanka, J. J.**, “Exploring the Earth, Sun and Stars - A Mid-year Project Report”, American Astronomical Society, 197th AAS Meeting, #54.16; *Bulletin of the American Astronomical Society*, Vol. 32, p.1495.

Kowinsky, J. A., **Smetanka, J. J.**, “Looking Through Spiral Galaxies”, American Astronomical Society, 196th AAS Meeting, #51.04; *Bulletin of the American Astronomical Society*, Vol. 32, p.755.

**Smetanka, J. J.** (1997) “A Color-Selected Spectroscopic Survey of Blue Galaxies to  $J = 22$ , I. Data and Spectroscopic Properties”, University of Chicago.

Munn, J.A., Koo, D. C., Kron, R. G., Majewski, S. R., Bershady, M. A., and **Smetanka, J. J.** (1997) “The Kitt Peak Galaxy Redshift Survey: Basic Photometric Data”, *Astrophysical Journal Supplements*, Vol. 109, p. 45.

Severson, Scott A.; **Smetanka, J. J.**; Rauscher, Bernard J.; Hereld, Mark, (1994) “Near Infrared Imaging of Cooling Flow Galaxies” in *Infrared Astronomy with Arrays, The Next Generation*, edited by Ian S. McLean. *Astrophysics and Space Science Library*, Vol. 190, p.153.

K Kodama et al. (1993) “Search for diffractive charm production in 800 GeV/c proton-silicon interactions”, *Physics Letters B*, Volume 316, Issue 1, 14 October 1993, Pages 188–19.

**Smetanka, J. J.**, “The Nature of Faint Emission-line Galaxies” in NASA Ames Research Center, *The Evolution of Galaxies and Their Environment* p 27-28

Majewski, Steven R.; Munn, Jeffrey A.; Kron, Richard G.; Bershady, Matthew A.; **Smetanka, J. J.**; Koo, David C., (1994) “Survey Incompleteness and the Evolution of the QSO Luminosity Function”, in NASA Ames Research Center, *The Evolution of Galaxies and Their Environment* p 7-8

Cudworth, K. M., **Smetanka, J. J.**, and Majewski, S. R. (1992) “The Globular Cluster M107 – Membership and Kinematics”, *Astronomical Journal*, vol. 103, p. 1252.

Majewski, S. R., Munn, J. A., Kron, R. G., Bershady, M. A., **Smetanka, J. J.**, and Koo, D. C., (1991) “A Proper Motion and Variability QSO Survey to  $B = 22.5$ ” in *The Space Distribution of Quasars*, p. 55-65.

**Smetanka, J. J.**, Bershady, M. A., Kron, R. G., Munn, J. A., Koo, D. C., and Majewski, S. R. (1991) “Emission-line Properties of Faint Quasars and Compact Galaxies”, in *The Space Distribution of Quasars*, p. 100.

### ***SELECTED SYNERGISTIC ACTIVITIES***

Principle Investigator for the 2011, \$150,000 FIPSE Grant to improve the instrumentation in the new \$39 million Sis and Herman Dupré Science Pavilion at Saint Vincent College.

Southwestern Pennsylvania Math Science Partnership, Member of the Science Leadership Team, Member of the Saint Vincent College Leadership Team 2003 - present. As part of the MSP, I have participated in training for and with the facilitation of the Science Leadership Academy, summer 2004. In addition, over the past three years I have developed and conducted several Physical Science Content-deepening Workshops for Teachers in concert with ScienceWISE, an organization that supports the use of inquiry-based instructional materials in K-8 science instruction in Westmoreland County. Prior to my involvement with the MSP, I have been a workshop instructor in Physical and Earth and Space Science for Saint Vincent's Teacher Enhancement Institute, a summer professional development project for K-12 teachers funded by the Pennsylvania Department of Education.

Evaluator for the Pennsylvania Department of Education 2003 – present. Served on review teams for the teacher certification programs in mathematics and physics at five different Colleges and Universities in the state of Pennsylvania.

Director of the Interdisciplinary Summer Research Program and Lancy Scholars Program at Saint Vincent College 2000-2004. This program, funded through a grant from the National Conferences for Undergraduate Research's Lancy Initiative, provided an intensive 10-week interdisciplinary research experience for first and second year undergraduates working on projects related to abandoned mine drainage mitigation. In addition to directing the program, I have served as a faculty mentor for student research projects involving the measurement of radioactivity in local wetlands and stream assessment.

Participant in Saint Vincent's team in NSF sponsored Science Education for New Civic Engagements and Responsibilities (SENCER) program, summer 2003. Revised several non-major science courses in Geology, Astronomy, and Physics based on the SENCER approach and existing SENCER models.

Principal Investigator for "Exploring the Earth, Sun, and Stars". This 2000-2001 project was a six-institution collaboration among middle and high school science teachers from four western Pennsylvania school districts, Indiana University of Pennsylvania, and Saint Vincent that utilized videoconferences with NASA research centers for teacher professional development and curriculum reform.

Instructor in the Pathways to Success Program 1997-2007. This program based at Saint Vincent College followed "at risk" youths from rising sixth graders to college who are currently attending urban Pittsburgh-area schools. The objective of the program was to improve student performance in the science, mathematics, and language arts so that the participants continue their education beyond high school. My role for six years was to develop the science curriculum and serve as a science instructor.