

DAVID J SMITH
Division of Science and Mathematics
University of the Virgin Islands
St. Thomas, US Virgin Islands 00802
Tel 340-693-1257, dsmith@uvi.edu

EMPLOYMENT HISTORY

Professor of Physics, University of the Virgin Islands, St. Thomas, U.S. Virgin Islands (1986-present)

Visiting Professor of Physics, one year sabbatical at Indiana University-Purdue University at Indianapolis, Indianapolis, IN (1996-1997)

Faculty Research Assistant, Lawrence-Livermore National Laboratory, Livermore, CA (Summer of 1987 and 1988)

Lecturer, California Polytechnic State University, San Luis Obispo, CA (1984-1986)

Graduate Research Assistant and Lecturer, Purdue University, West Lafayette, IN (1975-1983)

EDUCATION

PhD in High Energy Experimental Physics, Purdue University, West Lafayette, Indiana (1983)

MS in Physics, Purdue University, West Lafayette, Indiana (1977)

BS in Physics, Missouri Southern State College, Joplin, MO (1975)

AS in Computer Science, Missouri Southern State College, Joplin, MO (1973)

PRESENTATIONS and PROFESSIONAL ACTIVITIES

Session Presenter, 13th Symposium on Education - American Meteorological Society Annual Meeting. Poster presentation: *Mesoscale Weather Modeling at UVI*. (Jan 2004)

Session Presenter, 12th Symposium on Education - American Meteorological Society Annual Meeting. Poster presentation: *Meteorology in the US Virgin Islands*. (Feb 2003)

Session Presenter, IASTED International Conference on Communications, Internet, and Information Technology, *Mobile Location*. (November 2002)

Author and Curriculum Director, SCI 301, *Applications of Science in the Natural World*, UVI General Education science curriculum. (1999-present)

Director, UVI WebPhysics Project: a collaboration of IUPUI Davidson College, Rose-Hulman, Moorhead State University, NHTC, Lincoln University, University of Indianapolis, Mississippi State University and UVI. (1997-present)

Workshop Participant, Institute of Integrative Studies, University of Ohio at Miami. (1999)

Session Presenter, AAPT Summer Conference at the University of Nebraska, *Hurricane Physics on a Mountainous Island*. (1998)

Plenary Speaker, American Association of Physics Teachers (Indiana Section) annual meeting at Purdue University,
Title: *Mocko Jumbie Physics on the Internet*. (1997)

Session Presenter, AAPT Summer Conference at Notre Dame University, *Analysis of Statics and Dynamics of Stiltwalking*. (1994)

Curriculum Redesign Team Member and Instructor, NSF funded Summer Science Enhancement Program; an intensive six-week on-campus program for high school graduates entering UVI science programs. (1992)

Workshop Instructor, HCOP funded MCAT Physics Review Workshops for pre-med students. (1990-1991)

Workshop Presenter, Virgin Islands Teacher Enhancement in Math and Science (VITEMS) program sponsored by NSF and UVI. (1990, 1991)

Workshop Director, Utilizing HyperCard in the Classroom,
a faculty workshop at UVI. (1990)

GRANTS and AWARDS

Visiting Scientist, UCAR Visiting Scientist Program, sponsored by Dr, Cindy Bruyere, NCAR Foothills Laboratory, Boulder Colorado (Feb 2005)

Workshop Participant, NCAR MM5 User's Workshop, NCAR Foothills Laboratory, Boulder Colorado (Jan 2005)

Projector Investigator, incubator project in microscale weather modeling, Virgin Islands EPSCoR grant. (Jan 2004)

Workshop Participant, NSF Centers for Development Initiative - Cyberinfrastructure Workshop, Arlington, VA. (April 2003)

Participant, Introducing Science Faculty to Materials Science and Engineering Workshop, University of Alabama, Tuscaloosa. (June 2002)

Participant, Enhancing Diversity in the Geosciences through National Dissemination of Online Weather Studies Workshop, National Weather Service Training Center, Kansas City, MO. (May, 2002)

Project Co-Investigator, Curriculum Development for Introductory Physics Courses, NSF funded grant. (2001 - present)

Project Director, Development of a Pre-Engineering Program,
a federally funded Title III project to initiate a 2/3 year
Pre-Engineering program at UVI. (1994-1995)

Participant, Transforming Physics Content Using Multi-Media Workshop, US Air Force Academy/University of Nebraska, Colorado Springs, CO. (1990)

Project Director, Modern Physics Laboratory Equipment, an NSF ILI equipment grant for UVI. (1989)

Project Director, Data Acquisition Stations for the Macintosh, UVI Margin of Excellence grant program. (1989)

RESEARCH INTERESTS

Microscale weather modeling. Primary author of EPSCoR infrastructure improvement proposal: Data and Modeling Research. (2003-04)

Mobile location using TDOA techniques in a multilateral system. (2002)

WebPhysics, a network of resources for introductory physics teaching. Pedagogical research utilizing the Internet to promote learning in Physics. (1996-present)

Establishment of a Two-Observatory Search for Earth Crossing Asteroids, NASA's South Carolina Space Grant program.
A synchronous search utilizing UVI's Etelman Observatory and the College of Charleston Physics Observatory. (1998-1999)

Analysis of Variable Stars, NASA's South Carolina Space Grant program. Installation of optical encoders and CCD camera at UVI's Etelman Observatory. Data collection for extinction and flat field calibration. (1994-1995)

Temperature Profiles in Fluid Modeling of Hot Gas Movement, Summer Faculty Research Program, Lawrence-Livermore National Laboratory, Livermore, CA. (1987-1988)

COMMUNITY SERVICE and ACTIVITIES

Choreographer and Performer,

Caribbean Dance Company (1994-1998)
IUPUI Moving Company at Indiana University-Purdue University at Indianapolis (1996-1997)
Ballet Theatre of the Virgin Islands (1987-1989)
Orchesis Dance Company, Cal-Poly State University (1984-1986)
Calgary City Ballet Company, Alberta, Canada (1983-1984)
Purdue Repertory Dance Company, Purdue University (1977-1983)

Mocko Jumbie (stiltwalker),

Hugo Moolenaar's World Famous Mocko Jumbies (1987-1989)
Mocko Jumbie Jamboree (1989-present)
Macy's Thanksgiving Day Parade (1995 and 1999)

President, Virgin Islands Astronomy Club (1993-1995)

Faculty Advisor, UVI Dance Club (1994-1997)

Faculty Advisor, UVI Explorer's Club (1992-1994)

PUBLICATIONS

George Edward, Robert Jayne and David J. Smith, *Mobile Location*, IASTED International Conference on Communications, Internet, and Information Technology Proceedings, November, 2003.

David J. Smith, *Flexural Stress in Windows During Hurricanes*, The Physics Teacher, October, 2000.

David J. Smith, *Friction and the Balanced Mocko Jumbie*, The Physics Teacher, November, 1997.