Curriculum Vitae

Yorke J. Brown, PhD

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EDUCATION

PhD (Physics), University of Virginia, 1979.
Studied dissipation effects in He-II under George Hess.

BS (Physics), Virginia Polytechnic Institute and State University, 1972.
Studied electrical properties of lipid membranes under Dale Long.

Physics Major, Western Maryland College, 1968-1970.

PROFESSIONAL EXPERIENCE

1988-Present.	Scientific and Engineering Consultant.
1998-2007.	Vice President, Sarnicola Simulation Systems, Inc.
2006	Fellow of the Department of Physics, Harvard University.
2003, 06, 08	Visiting Associate Professor of Physics, Dartmouth College.
1988-1990.	Partner, Cardullo, Brown and Associates.
1988	Adjunct Professor, Watson School of Engineering, SUNY Binghamton.
1988.	Manager, Visual Engineering, Link Flight Simulation Division of The Singer Company.
1985-1988.	Section Head, Visual Systems Engineering, Link Flight Simulation Division of The Singer Company.
1983-1985.	Systems Engineer, Visual Engineering Department, Link Flight Simulation Division of The Singer Company.
1980-1984.	Assistant Professor of Physics and Electrical Engineering Technology, SUNY Binghamton.
1978-1980.	Instructor in Physics, Mary Washington College.
1979.	Adjunct Instructor in Continuing Education, University of Virginia.
1977-1978.	Instructor in Physics (Part Time), University of Virginia.
1975-1980.	Various Positions, Appalachian Search and Rescue Conference, Inc.
1974-1978.	Research Assistant (to George B. Hess), University of Virginia Physics Department.
1974-1975.	Graduate Teaching Assistant (to Doris Kuhlmann-Wilsdorf), University of Virginia Physics Department.
1973-1976.	Vice President, Appalachian Adventures, Inc.
1971-1972.	Research Assistant (to Dale D. Long), Virginia Polytechnic Institute and State University Physics Department.
1970.	Teaching Assistant (to Silverio P. Almeida), Virginia Polytechnic Institute and State University Physics Department.
1969-1970.	Teaching Assistant (to William T. Achor), Western Maryland College.

FELLOWSHIPS

University Awards Program Fellow, SUNY Binghamton, 1982-84.
Departmental Fellow, UVa, 1975-77.
Leland B. and Virginia C. Snoddy Fellow, UVa, 1974-75.
Governor's Fellow, UVa, 1972-74.

MEMBERSHIPS

American Physical Society
Institute of Electrical and Electronic Engineers
Aircraft Owners and Pilots Association

PUBLICATIONS

"A Technique for a Self-Luminous Flatfield Calibration Screen," ASP Conference Series 364, 571 (2007).

"Preliminary Results from Detector-Based Throughput Calibration of the CTIO Mosaic Imager and Blanco Telescope Using a Tunable Laser," (with CW Stubbs, *et al.*)ASP Conference Series 364, 373 (2007).

"The 2.5 m Telescope of the Sloan Digital Sky Survey," (with JE Gunn, *et al.*), The Astronomical Journal 131, 2332-2359 (2006).

"Support and control of primary and secondary mirrors for the Sloan Digital Sky Survey (SDSS) telescope," (with L Carey, *et al*.), Proceedings of the SPIE, 4836-24 (2002).

"Improvements to the Apache Point 3.5-m Primary Mirror Support System," (with J Davis), Proceedings of the SPIE, 3351-39 (1998).

"High Speed, High Resolution, Ultrasonic Position and Orientation Tracker," (with SC Puma and JB Sinacori), US Patent 5,339,259 (1994).

"Analysis and Development of Advanced Techniques for Cuing the Force and Motion Environment in the Simulator of the Future," (with FM Cardullo and GR McMillan), Invited Paper at the Royal Aeronautical Society European Forum on Matching Technology to Training Requirements, London (1992).

"New Approaches to Motion Cuing in Flight Simulators," (with FM Cardullo, GR McMillan, GE Riccio, and JB Sinacori), Air Force Technical Report AL-TR-1991-0139 (1991).

"Advanced Techniques for Cuing the Force and Motion Environment in the Simulator of the Future," (with FM Cardullo and GR McMillan), AIAA Flight Simulation Technologies Conference paper 90-3135 (1990).

"Visual System Lags: The Problem, The Cause, The Cure," (with FM Cardullo), IMAGE V Conference, (1990).

"Need-Based Evaluation of Simulator Force and Motion Cuing Devices," (with FM Cardullo and JB Sinacori), AIAA Flight Simulation Technologies Conference paper 89-3272-CP, (1989).

"An Improved Measurement of the Surface Area of DLX-6000 Microspheres," J. Low Temp. Phys. 60, 183 (1985).

"The Shape of a Superfluid Vortex Nucleated at a Sharp Edge," J. Low Temp. Phys. 54, 155 (1984).

"Inhomogeneous Nucleation of Superfluid Vorticity at a Sharp Edge," (with GB Hess), J. Low Temp Phys. 49, 265 (1982).

"Superfluid He-4 Flow Through Pinholes," (with GB Hess and GM Shifflett), Bull Am. Phys. Soc. 24, 606 (1979).

TEACHING EXPERIENCE

Dartmouth College
- General Physics
- Astronomy

SUNY Binghamton
- Optical Technology (graduate course)
- Electro-Mechanical Instrumentation (Lecture and Lab)
- Acoustics
- General Physics
- Sophomore Physics Laboratory
- Statistical Thermodynamics (graduate course)
- Astronomy (introductory course)
- Communications Theory

Mary Washington College
- General Physics
- General Physics Laboratory
- Optics
- Classical Mechanics
- Introduction to Computer Science

University of Virginia
- Metric System for Teachers
- Electronics for Physics Majors

Architectural Physics (teaching assistant)

Virginia Polytechnic Institute and SU
Electricity and Magnetism Lab (teaching assistant)

Western Maryland College
Physical Science for Non-Scientists (undergraduate lab instructor)

Other Teaching Activities
Primary, Commercial, and Instrument Flying as a Certified Flight Instructor
Total Quality Management courses at Singer-Link
Wilderness Rescue, Emergency Medicine, Search and Rescue Leadership for the Appalachian Search and Rescue Conference and for the Virginia Wing, Civil Air Patrol

REFERENCES

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