Curriculum Vitae

Frederick Ross

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Date of Birth: June 20, 1983

Education

Doctor of Philosophy (Biology)

The Rockefeller University, 2011?

(Work taking place at EPFL, Switzerland)

September 2005 - present

Batchelors of Science (Physics), Batchelors of Arts (Mathematics)

University of Virginia, 2005 September 2001 - May 2005

Past Employment

September 2004 — May 2005

Department of Physics, University of Virginia Teaching assistant and grader

- Phys 142R (Fall 2005, instructor Keith Williams) Introductory mechanics for honors engineering students
- Phys 312 (Spring 2005, instructor Eugene Kolomeisky) Widely applied physics, largely fluids, menisci, and capillarity

October 2001 — January 2005

Antimatter Asymmetry Group, University of Virginia Research assistant

- filtering and reduction of the HyperCP dataset (120TB) for further analysis by doctoral students
- designed auxiliary mechanical equipment in AutoCAD for the MIPP experiment at Fermilab
- built and wrote control software for a CAMAC based data acquisition system
- designed, built, and tested a spark chamber (thesis)

- wrote code and provided instruction and assistance in C, FOR-TRAN, and Perl
- maintained Linux systems and provided assistance and instruction in their use

June 1999 — August 2001

Logical Support, Inc. of Independence, Virginia Systems administrator and troubleshooter

- built and repaired PCs
- installed and administered Linux servers and workstations
- set up local area networks for clients
- day to day programming and internal application development in C, C++, Perl, Python, Javascript, and Unix shell

Writings

Stangler, R. and Ross, F., *Proper Paranoia*, J. Prac. Psych., Vol. 7 No.3 pp.220-225 (May 2001)

Ross, F., Fermi-Ulam-Pasta Revisited, Frederick Ross, Final project for independent study in statistical mechanics under Eugene Kolomeisky (December 2003)

Ross, F., *Uncertainty Principles*, Distinguished Majors Thesis for Mathematics (May 2004)

Ross, F. and Zaidi, H., *The Zel'dovich Effect and Related Problems*, Final project for independent study in Fall 2004 under Eugene Kolomeisky (December 2004)

Ross, F., Spark chambers as low cost, low rate detectors, Undergraduate physics thesis under Edmond Craig Dukes (December 2004)

Martial arts

Brown belt, Sansei Goju Ryu Karate (1995-1999), Virginia Karate Studio, Independence, VA

Capoeira (2002-2004), Capoeira Club, University of Virginia

Pa Ka Chang (2006-present), Ch'iang Shan Pa Kua Chang Assocation, master Park Bok-Nam

Reading Level Speaking Level Language English native native French B2В1 Languages Italian A1 A2German A1 A1 Japanese Hiragana A1

Music

Violin (1987-present); teachers include: Hasse Borup (University of Virginia, 2002-2005), Katherine Winterstein (University of Virginia, 2001-2002), Nancy Bargerstock (Appalachian State University, 2000-2001), RJ Wohlman (Appalachian State University, 1998-2000), Edward Johnson (1994-1998)

Treble viol (2004-present); University of Virginia Early Music Ensemble, viol consort directed by Loren Ludwig

Baroque violin (2002-present); University of Virginia Early Music Ensemble under Dr. Paul Walker

Classical guitar (1997-1999); self taught

Voice, Theory, and Composition (1999-2001) with Marietta Carmichael, director of the New River Opera Company

Piano (2000-2001) with Sidney Fant

Computer Skills

Current mastery of Java (particularly writing plugins for ImageJ), Haskell, SQL (PostgreSQL); recently used skill in R, Perl, and Python. At least one non-trivial project in the past in Scheme, MATLAB, C, Javascript, PHP, FORTRAN, and Unix shell.

Skilled with LaTeX and emacs. Past experience with gnuplot and Maple.

extensive administration experience on Linux, OpenBSD, and FreeBSD; experience with Windows (all variants prior to XP) and MacOS X

March 31, 2009