# Kameron Decker Harris — Curriculum Vitae


**Contact Information**

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**Education**

**University of Vermont**, Burlington, Vermont
- B.A., Mathematics, May 2009. Honors thesis topic: *Predicting Climate Regime Change in Chaotic Convection*. Advisor: Christopher M. Danforth.
- B.A., Physics, May 2009.

**Pontifícia Universidad Católica de Valparaíso**, Valparaíso, Chile
- ISEP Exchange Program, July 2007 to January 2008

**Research and Teaching**

Current Research
- Chaotic convection with Chris Danforth, spring 2008 to present
- Growth of optimal leaf venous networks with Peter Dodds, fall 2008 to present

Undergraduate Research
- Maximal sets of mutually orthogonal latin squares with Adam Wolfe, spring 2007
- Atomic force microscopy with Jie Yang, spring and summer 2007

Grader
- MATH 173 Basic Combinatorial Theory, spring 2007
- MATH 019 Fundamentals of Calculus I, fall 2008

Tutor
- UVM Learning Coop "in-house" tutor, December 2006 to March 2009
- VSAC Tutor Academy 2008
- Worked independently with students in the community

**Invited Lectures**

Harris, KD, Ridouane, E-H, Allgaier, NA, and Danforth, CM. *Predicting Climate Regime Change in Chaotic Convection*. University of Vermont, Burlington, VT. April 2009.

Harris, KD and Danforth, CM. Substitude lecturer for MATH 266 Chaos and Fractals. University of Vermont, Burlington, VT. January 2009.

Harris, KD and Danforth, CM. *Forecasting in a Chaotic Toy Climate*.
- MAA Northeastern Sectional Meeting, St. Michael's College, Burlington, VT. 2008.
- University of Vermont, Burlington, VT. 2008.

**Co-authored Lectures**

Danforth, CM, Harris, KD, Allgaier, NA, and Ridouane, E-H. *Data Assimilation as Synchronization of Model Forecasts to Observation.* Climate Change Summer School, MSRI, UC Berkeley, Berkeley, CA. 2008.

Danforth, CM, Harris, KD, Allgaier, NA, and Ridouane, E-H. *Chaos and the Mathematics of Prediction: Harry Potter, Hurricane Katrina, and Happiness.* MAA Northeastern Sectional Dinner Meeting, Simmons College, Boston, MA. 2008.

Danforth, CM, Harris, KD, Allgaier, NA, and Ridouane, E-H. *Chaos and the Mathematics of Prediction: from Hurricanes to Climate Change.* Bates College, Lewiston, ME. 2008.

**Honors and Awards**

**University**
- Pending Fulbright scholarship to study transportation in Chile, 2010
- URECA! grant for thesis research, 2008–2009
- Honors College member, an academic and residential program
- Vermont Scholar, provided full tuition and stipend for undergraduate study
- GPA 3.93 cumulative, 4.00 in mathematics, and 3.95 in physics; graduated *magna cum laude*
- GRE general scores: 690 verbal, 800 quantitative

**High School**
- Certificate of merit in the statewide UVM Math Contest, 2003 and 2004

**Skills**

- Programming: MATLAB, C, LaTeX, Java, HTML
- Operating Systems: Unix/Linux, OS X, Windows
- Fluent in Spanish including the vernacular of Chile
- Courses at graduate level: complex networks and systems, quantum and classical mechanics

**Interests**

Skiing, frisbee, hiking, biking, Nature