

Education

University of Chicago*Ph.D. Candidate in Physical Chemistry**M.S. in Chemistry, GPA: 3.90/4.00*

Chicago, Illinois

Expected: August 2020

December 2015

McGill University*B.Sc., Major in Chemistry, GPA: 3.95/4.00*

Purves Prize for highest GPA of a chemistry major

Montreal, Quebec

May 2014

Theory and Computational Research Experience

University of Chicago: Graduate Research Assistant*Supervisor: Prof. Suri Vaikuntanathan*

Dec. 2014 to Present

- Characterize control parameters for complex nonequilibrium soft condensed matter systems and biophysical processes using computational and theoretical techniques.
- Mentored a high school student studying random walks in complex environments.

Sorbonne University, Paris: Visiting Researcher*Supervisor: Prof. André Estevez-Torres*

Summer 2019

- Model interactions between active matter and reaction-diffusion systems to understand morphogenesis-related phenomena.

McGill University, Montreal: Undergraduate Research Assistant*Supervisor: Prof. David Ronis*

Summer 2013

- Developed theory and wrote a computer program to study the pair correlation functions of suspensions of charged polymer-coated colloids.

Teaching Experience

University of Chicago: Teaching Assistant and Graduate Course Grader*Classes: Honors General Chemistry, Statistical Thermodynamics* Sept. 2014 to Dec. 2018

- Planned and taught discussion sections; designed, wrote and graded assignments, exams, and lab reports; proctored labs.

Publications

C. del Junco, S. Vaikuntanathan. (2020) *Robust oscillations in multi-cyclic models of biochemical clocks*. J. Chem. Phys. 152, 055101. **Editor's Pick**

C. del Junco, S. Vaikuntanathan. (2020) *High chemical affinity increases the robustness of biochemical oscillations*. Phys. Rev. E. 101, 012410

C. del Junco, S. Vaikuntanathan. (2019) *Interface height fluctuations and surface tension of driven liquids with time-dependent dynamics*. J. Chem. Phys. 150, 094708. **Editor's Pick**

C. del Junco, L. Tociu, S. Vaikuntanathan. (2018) *Energy dissipation and fluctuations in a driven liquid*. Proc. Natl. Acad. Sci. U. S. A. 115, 3569-3574

Presentations

Invited

Nov. 2019: *Talk*, Paul François Lab, Department of Physics, McGill University

June 2019: *Talk*, Northwestern Theoretical Chemistry Seminar

March 2017: *Talk*, University of Chicago Materials Research Center Bag Lunch Seminar

Contributed

August 2019: *Talk and Poster*, Soft Matter Gordon Research Seminar

January 2019: *Poster*, Berkeley Statistical Mechanics Meeting **Awarded best poster prize**

September 2018: *Poster*. Stochastic Thermodynamics: Experiment and Theory Meeting (Max Planck Institute for the Physics of Complex Systems)

June 2018: *Talk*, Midwest Theoretical Chemistry Conference

March 2017: *Talk*, American Physical Society March Meeting

January 2017: *Poster*, Berkeley Statistical Mechanics Meeting

July 2015: *Poster*, Telluride School on Theoretical Chemistry

Service

Journal of Chemical Physics

Referee 2019 - Present

Women in Chemistry at the University of Chicago

Member 2014 - Present

- Organized a social event for gender minorities at the Midwest Theoretical Chemistry Seminar in June 2019.

Graduate Students United at the University of Chicago

Chemistry Departmental Organizer and Steward Oct. 2016 to March 2019

- Advocated for graduate student worker rights in chemistry and across the university.

Awards

University of Chicago Harper Dissertation Completion Fellowship 2019 to 2020

Best Poster Prize, Berkeley Statistical Mechanics Meeting January 2019

Natural Sciences and Engineering Research Council of Canada
Postgraduate Scholarship-Doctoral 2018 to 2020

John C. Light Memorial Fellowship in Theoretical Chemistry 2018 to 2019

University of Chicago Arts, Science & Culture Fellowship 2017 to 2018

University of Chicago Freud Fellowship 2014 to 2015

McGill Summer Undergraduate Research Award Summer 2013

DAAD Research Internships in Science and Engineering Scholarship Summer 2012

References

Prof. Suri Vaikuntanathan, PhD advisor at the University of Chicago

Email: svaikunt@uchicago.edu. Phone: +1 (773) 702-7256

Prof. André Estevez-Torres, Research advisor/collaborator at Université Sorbonne

Email: andre.estevez-torres@upmc.fr. Phone: +33 1 44 27 77 72

Prof. Aaron Dinner, Thesis committee member at the University of Chicago

Email: dinner@uchicago.edu. Phone: +1 (773) 702-2330