

Education

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

Chicago, Illinois

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

Selected Research Experience

University of Chicago: Postdoctoral Scholar*Supervisor: Prof. James Evans*

Sept. 2020 to present

- I apply machine learning methods such as natural language processing to large data sets on publication, grant funding, and research teams to study processes of knowledge production, especially in science.

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

Dec. 2014 to Aug. 2020

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

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

Summer 2019

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

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

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

Available upon request