

## Education

**University of Chicago***Ph.D. Candidate 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