Adam A.S. **Green**

adam.aagen.green@gmail.com | (720) 278-5986

Key Skills and Highlights

Programming	*Python* (pandas, matplotlib, numpy, scipy, trackpy), *FORTRAN* (lapack), *Mathematica*, *openFOAM*, LaTeX
Mathematics	Eigenvalue and eigenvector problems, spatial defect tracking, Brownian/stochastic motion, perturbation analysis, electro-optic behaviour of soft matter systems
Communication	Skilled scientific writer and communicator, experienced interdisciplinary and international collaborator, mentorship and supervision of 4 undergraduate research students
Achievements	First place in 2017 NSF MRSEC Center *Science Slam* (3-minute scientific presentation competition), 4 peer-reviewed publications in 4 distinct subfields, Poster presentation at the International Liquid Crystal Conference, Oral presentation at the Ferroelectric Liquid Crystal Conference

Education

Ph.D Physics University of Colorado Boulder . . . . . July 2019

-Liquid Crystal Phases and Dynamics: Correlations in the 2D XY Model, Helical Bannana Phases, and 2D Fluid Dynamics

M.S. Physics University of Colorado Boulder . . . . . May 2015

B.Sc. Physics Honours (First Class) University of Calgary . . . . . May 2011

-Improving the Efficiency of a Controlled Dipole Quantum Memory

Experience

Graduate Researcher University of Colorado Boulder, CO, USA 2015-Present

Fluid Dynamics	*Investigated the 2D fluid dynamics of freely-suspended liquid crystals (published)*
Materials Science	*Discovered two new phases of matter using electro-optical, X-ray techniques (published)*
Soft Matter	*Investigated the nucleation of topological defects in liquid crystal system*

Graduate Researcher NIST, Boulder, CO, USA 2013-2015

Optics	*Designed and fabricated whispering gallery optical cavities for laser frequency stabilization applications (published)*

Undergraduate Researcher University of Calgary, AB, CAN 2007-2012

Quantum Optics	*Designed an optimally efficient optical quantum memory (published)*
Quantum Statistics	*Investigated statistical convergence of bosonic and fermionic systems*
Complexity Science	*Studied the time and space correlations of earthquake magnitudes (published)*

Hobbies and Interests

- *Birdwatching and Nature*— the Front Range is rich in its variety of ecosystems and native species, and it is a constant delight to be out among them.
- *Board Games*— Fellow graduate students introduced me to the joys of gaming, my current favourite is Carcassonne.