# Yara Mohajerani

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#### **EDUCATION**

• Ph.D. in Earth System Science, UC Irvine (expected)

• M.S. in Earth System Science, UC Irvine (2016)

• Honours BSc in Physics, University of Toronto (2014)

# (cumulative GPA: 4.00/4.00) (cumulative GPA: 3.89/4.00)

#### **PUBLICATIONS**

• Mohajerani, Seyedyara, and John R. Percy. "Do Eclipsing Variable Stars Show Random Cycleto-cycle Period Fluctuations?" *JAAVSO* 39 (2011). Web. 11 Jan. 2011.

## **PRESENTATIONS**

- "Optimization of Spherical Cap Mascon Processing on the Ice Sheets for the GRACE and GRACE-FO Missions", Yara Mohajerani, Isabella Velicogna, Tyler Sutterley. Poster presentation at American Geophysical Union (AGU) Fall 2016 meeting.
- "Reducing uncertainties in Greenland surface mass balance using IceBridge and ICESat altimetry, GRACE data and regional atmospheric climate model outputs", Yara Mohajerani, Tyler Sutterley, Isabella Velicogna, Michiel van den Broeke, Xavier Fettweis. Poster presentation at American Geophysical Union (*AGU*) Fall 2015 meeting.
- "October Eurasian Snow and its Effects on Wintertime Atmospheric Parameters", S. Mohajerani, P. Kushner, C. Derksen, poster presentation at the 2013 Center for Global Change Science internship seminar, University of Toronto, Toronto, Ontario, August 2013.
- "The Diverse Nature of the Cyclic Photometric Variability of T Tauri Stars", Percy, J.R., Bae, T., Long, J., Mohajerani, Y., Stonehouse, S., Terziev, E., Yang, J., poster paper at the 2010 meeting of the Canadian Astronomical Society, Halifax NS, May 2010.

#### ACHIEVEMENTS AND AWARDS

• Jenkins Family Graduate Fellowship, Earth System Science, UC Irvine	October 2014
• KEGS Foundation Scholarship, Canadian Exploration Geophysical Society	July 2014
• Don Salt Memorial Scholarship, Canadian Exploration Geophysical Society	y March 2014
Hymie and Roslyn Mida Student Award in Theoretical Physics	January 2014
• The Dean's List	June 2011-2014
<ul> <li>Arthur Leonard Schawlow Scholarship, University of Toronto</li> </ul>	June 2010-2013
• Queen Elizabeth II Aiming for the Top Scholarship Se	eptember 2010-2013
• The 3T0 M&P and Associates Scholarship, University of Toronto	November 2012
• Leslie Langbord Saunders Scholarship, University of Toronto	November 2011

• University of Toronto Scholar Scholarship

September 2010

#### TECHNICAL SKILLS

- Proficient in Python (NumPy, SciPy, MPI parallel processing, Matplotlib plotting, Pandas, rpy2 R interface, scikit-learn machine learning, etc.)
- Familiar with MATLAB, R, STELLA
- Working with NetCDF files (CDO, NCO, Ncview)
- Project management on Github
- Latex and Markdown

#### RESEARCH EXPERIENCE AND PROJECTS

• Graduate Student Researcher

September 2014 - Present

- o Under the supervision of Dr. Isabella Velicogna, Earth System Science, UC Irvine
- o Remote Sensing of the ice sheets using gravity and altimetry satellite data
- Undergraduate Thesis Research Course September

2013 - April 2014

- Under the supervision of Professor Paul J. Kushner, Department of Physics, University of Toronto
- Examined Eurasian snow and its relationship with wintertime atmospheric circulation.
- Centre for Global Change Science (CGCS) Summer Internship
   May August 2013
  - Under the supervision of Professor Paul J. Kushner, Department of Physics, University of Toronto
  - o Analyzed the relationship between October Eurasian snow and atmospheric circulation of the following winter.
- Summer Research, Condensed Matter Physics

May - August 2012

- Under the supervision of Professor Kenneth Burch, Department of Physics, University of Toronto
- Prepared samples using mechanical exfoliation and measured them at the Canadian Light Source in Saskatchewan, Canada in order to study electron density waves of "2D" crystals
- Undergraduate Researcher, Condensed Matter Physics

May - December 2011

- Under the supervision of Professor Kenneth Burch, Department of Physics, University of Toronto
- Worked on Raman spectroscopy: Took measurements to quantify the thermal conductivity of nanoparticles; improved and maintained the equipment
- Student Summer Research Job

June - August 2010

- Under the supervision of Professor John R. Percy in the Department of Astronomy and Astrophysics at the University of Toronto
- Wrote JAVA scripts to analyze fluctuations in the periods of binary star systems
- Research Mentorship Program

December 2009 - May 2010

- Under the supervision of Professor John R. Percy in the Department of Astronomy at the University of Toronto (as a high school student)
- o Analyzed luminosity time series of T Tauri stars

## TEACHING EXPERIENCE

Introduction to Spatial-Temporal Statistics (2017)

Modelling the Earth (ESS19 - 2017)

Sustainable Oceans (ESS27 - 2016)

Oceanography (ESS3 - 2016)

Data Science Initiative, UC Irvine
Earth System Science, UC Irvine
Earth System Science, UC Irvine

Data Analysis (ESS116 - 2015, 2016)

Earth System Science, UC Irvine

## **ACTIVITIES**

• Executive member on the Physics and Astronomy Student Union (PASU) council at the University of Toronto

November 2012 - April 2014

• Undergraduate-level physics tutoring 2013-2014

• High school senior-level math tutoring 2013

 Member of the University of Toronto Outing Club June 2013 - August 2013 October 2012 - January 2013 2011-2012