

## Adiv Paradise

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50 St George St Room 203  
Toronto, ON M5S 3H4  
paradise@astro.utoronto.ca

### EDUCATION

**University of Minnesota - Twin Cities** May 2014  
B.S. in Astrophysics and Physics, *magna cum laude*

**University of Toronto** Started September 2015  
Ph.D. Candidate in Astrophysics

### RESEARCH GROUPS

**Exoplanetary Climates & Habitability** 2015–Present  
*Dr. Kristen Menou, University of Toronto*

**CHIME Radio Telescope Data Processing** 2015  
*Dr. Keith Vanderlinde, University of Toronto*

**Computational Fluid Dynamics & Numerical Methods** 2013–2015  
*Drs. Paul Woodward & William Dai, University of Minnesota & Los Alamos National Laboratory*

**Solar Wind & Magnetospheric Physics** 2011–2014  
*Drs. Cynthia Cattell & Aaron Breneman, University of Minnesota*

### JOURNAL PUBLICATIONS

1. **Adiv Paradise**, Kristen Menou, Diana Valencia, and Christopher Lee. *Habitable Snowballs: Generalizing the Habitable Zone*. March 2018. (Submitted; arXiv:1803.00511)
2. **Adiv Paradise** and Kristen Menou. *GCM Simulations of Unstable Climates in the Habitable Zone*. *The Astrophysical Journal*, 848(1):33, 2017
3. Kiyoshi W. Masui, J. Richard Shaw, Cherry Ng, Kendrick M. Smith, Keith Vanderlinde, and **Adiv Paradise**. *Algorithms for FFT Beamforming Radio Interferometers*. oct 2017. Under review
4. Cherry Ng, Keith Vanderlinde, **Adiv Paradise**, Peter Klages, Kiyoshi Masui, Kendrick Smith, Kevin Bandura, Patrick Joseph Boyle, Matt Dobbs, Victoria Kaspi, Andre Renard, J Richard Shaw, Ingrid Stairs, and Ian Tret'yakov. *CHIME FRB: An application of FFT beamforming for a radio telescope*. XXXIIth URSI General Assembly & Scientific Symposium (URSI GASS) 2017, August 2017
5. Daniel Tamayo, Ari Silburt, Diana Valencia, Kristen Menou, Mohamad Ali-Dib, Cristobal Petrovich, Chelsea X. Huang, Hanno Rein, Christa van Laerhoven, **Adiv Paradise**, Alysa Obertas, and Norman Murray. *A Machine Learns to Predict the Stability of Tightly Packed Planetary Systems*. *The Astrophysical Journal*, 832(2):L22, nov 2016
6. A. W. Breneman, C. A. Cattell, K. Kersten, **Paradise, A.**, S. Schreiner, P. J. Kellogg, K. Goetz, and L. B. Wilson. *STEREO and Wind observations of intense cyclotron harmonic waves at the Earth's bow shock and inside the magnetosheath*. *Journal of Geophysical Research: Space Physics*, 118(12):7654–7664, 2013

7. A. Breneman, C. Cattell, J. Wygant, K. Kersten, L. B. Wilson, L. Dai, C. Colpitts, P. J. Kellogg, K. Goetz, and **Paradise, A.** Explaining polarization reversals in STEREO wave data. *Journal of Geophysical Research: Space Physics*, 117(4):1–8, 2012

## SELECTED CONFERENCE PROCEEDINGS

1. A. Paradise and K. Menou. ‘The Habitability of Frozen Worlds’. *Emerging Researchers in Exoplanet Sciences III* (Talk), June 2017
2. A. Paradise and P. Woodward. ‘Toward a new implicit scheme using Riemann invariants’. *JINA-CEE GNASH: The anomalous metal-poor stars and convective-reactive nuclear astrophysics* (Talk), May 2015
3. A. Paradise and K. Menou. ‘Stable weathering equilibria in snowball planets in the habitable zone’. *Emerging Researchers in Exoplanet Sciences II* (Poster), June 2016
4. A. Paradise, P. Woodward, and W. Dai. ‘Development and Optimization of a Fast Poisson Solver using a Red-Black Multigrid Approach in 2-D’. *LANL Computing and Information Technology Student Mini Showcase* (Poster), July 2014
5. A. Paradise, A. W. Breneman, C. A. Cattell, K. Kersten, S. Schreiner, P. J. Kellogg, K. Goetz, and L. B. Wilson, III. ‘STEREO and Wind Observations of Intense Cyclotron Harmonic Waves at the Earth’s Bow Shock’. *American Geophysical Union Fall Meeting* (Poster), December 2013

## SELECTED OUTREACH

### **ASX: Astronomy & Space Exploration Society**

“Is Anybody Out There?” Panel Discussion – Panelist March 7, 2018

### **AstroTours Astronomy Outreach Events**

“Cold Out There, Eh? The Climates of Alien Worlds” (Lecture) March 1, 2018

### **Dunlap Institute for Astronomy & Astrophysics**

“The Squid-People of Proxima b” (‘Astro on Tap’ Talk) March 23, 2018  
 “Ask an Astronomer” Email Service 2016–Present

### **University of Toronto Libraries “Science Literacy Week”**

Human Book: ‘What is an Astronomer?’ September 2017

### **AAAS “Book Smart” Book Club: ‘The Hunt for Vulcan’ by Thomas Levinson**

Expert Facilitator for Book Discussion 2016

## SELECTED AWARDS

**Lachlan Gilchrist Fellowship** 2017  
 4500 CAD

**Centre for Planetary Sciences Graduate Fellowship** 2015  
 5000 CAD/year; 2 years

**Outstanding Technical Presentation Award** 2014  
 Los Alamos National Laboratory

**Hagstrum Award for Physics Research** 2014  
 1000 USD