

# LISA DANG

lisa.dang@physics.mcgill.ca :: +(438)498-5767

Final Year Ph.D. Candidate

3550 Rue Université, Montréal, QC, Canada

## EDUCATION

**Ph.D. Physics**, McGill University Sep 2016 - Present

Fast-tracked from Masters to PhD in January 2018

Advisor: Prof. Nicolas B. Cowan

**Expected Graduation: Summer 2021**

*Now on the job market for post-doc positions*

**B.Sc. Physics** McGill University Sep 2012 - Feb 2016

Honours Physics

Thesis Advisor: Prof. Andrew Cumming

## AWARDS AND FELLOWSHIPS

**Hackathon Weather Challenge Winner**, Climate Change AI Hackathon at MILA 2019

**Selected for travel grant to attend ComSciConCAN**, McMaster University 2019

**Best Presentation Award**, Centre de Recherche en Astrophysique du Québec Meeting 2019

**Student Travel Award**, Exoclines V 2019

**Postgraduate Scholarships-Doctoral (PGSD)**, NSERC 2019

**Travel Award**, 3rd Advanced School on Exoplanetary Science (*declined*) 2019

**Special Recognition for the Principals Prize for Public Engagement**, McGill University 2019

**Graduate Excellence Travel Award**, McGill University 2019

**Travel Award**, 23rd Annual International Microlensing Meeting 2019

**Intact Challenge and Hackathon Winner**, McGill Codejam 2018

**TEPS X-I2 Internship Award**, Technologies in Exo-Planetary Sciences 2018

**Graduate Mobility Award**, McGill University 2018

**Trottier Graduate Award**, McGill University 2018

**Mary Louise Taylor Award**, McGill University 2018

**Best Student Presentation Award**, Women in Physics Canada 2018

**Relève Étoile Louis-Berlinguet Award**, FRQNT 2018

**TEPS PhD Fellowship**, Technologies in Exo-Planetary Sciences 2018

**McGill Hackathon Graduate Leadership Award**, McGill University 2017

**Carl Reinhardt Fellowship - Travel Award**, McGill University 2017

**Visiting Graduate Research Fellowship**, California Institute of Technology 2017

**Trottier Graduate Award - Astrophysics Bonus**, McGill University 2016

## ACCEPTED PROPOSALS

**The Life and Death of Ultra-Hot Jupiter WASP-12b** 2020

*Hubble Space Telescope*, 44 orbits requested, PI: Taylor J. Bell, Co-I Lisa Dang et al.

**A Test of the Fundamental Physics Underlying Exoplanet Climate Models** 2018

*Spitzer Space Telescope*, 44.2 hours awarded, PI: Thomas Beatty, Co-I Lisa Dang et al.

**Revealing Fact or Fiction in Spitzer Exoplanet Phase Curve Trends** 2018

*Spitzer Space Telescope*, 620 hours awarded, PI: Jacob Bean, Co-I Lisa Dang et al.

## RESEARCH PUBLICATIONS

### REFEREED ARTICLES

1. “Pixel Level Decorrelation in Service of the Microlensing Parallax Spitzer Campaign”  
**Dang, L.**, Calchi Novati, S., Carey, S., Cowan, N. B., *accepted to Monthly Notices of the Royal Astronomical Society*
2. “No Hot-Spot Offset in *Spitzer* Full-Orbit Phase Curves of Qatar-1b”  
Keating D., Stevenson K., Cowan N., Bean J., Bell T., **Dang, L.**, et al., *AJ*, Vol 159, Number 2, 2020, p.225
3. “Evidence for H<sub>2</sub> Dissociation and Recombination Heat Transport in the Atmosphere of KELT-9b”  
Mansfield M., 8 authors, **Dang, L.**, et al., *ApJL*, Vol 888, Number 2, 2020, p. L15
4. “Mass loss from the exoplanet WASP-12b inferred from *Spitzer* phase curves”  
Bell, T. J., Zhang, M., Cubillos, P. E., **Dang, L.**, et al., *Monthly Notices of the Royal Astronomical Society*, Vol 489, Issue 2, 2019, p. 1995–2013
5. “Uniformly hot nightside temperatures on short-period gas giants”  
Keating, D., Cowan, N. B., and **Dang, L.**, *Nature Astronomy*, 2019, p. 426
6. “Detection of a Westward Hotspot Offset in the Atmosphere of a Hot Gas Giant CoRoT-2b”  
**Dang, L.**, Cowan, N. B., et al., *Nature Astronomy*, Vol 2, Issue 3, 2018
7. “How Astronomers View Education and Public Outreach: An Explorative Study”  
**Dang, L.**, Russo, P., *Communicating Astronomy with the Public Journal*, Issue 18, 2015

### CONFERENCE NEWSPAPER

1. “What do you think about public outreach in astronomy?”  
**Dang, L.**, et al., *KAI’ALELEIAKA: Newspaper of the IAU XXIX General Assembly*, Issue 4, 2015

### RESEARCH EXPERIENCE

<b>Graduate Research Assistant</b> , McGill University, Montréal, QC	Sep 2016 - Present
<b>Queue-Mode Observer</b> , Observatoire du Mont-Mégantic, QC	Oct 2017
<b>Visiting Graduate Research Fellow</b> , Caltech - IPAC, Pasadena, CA	Feb 2017 - Aug 2017
<b>Research Trainee</b> , McGill University, Montréal, QC	Dec 2015 - Aug 2016
<b>Summer Research Student</b> , Leiden University, Leiden, NL	May 2015 - Jul 2015
<b>Honours Thesis Student</b> , McGill University, Montréal, QC	Sep 2014 - Apr 2015

### TEACHING, EDUCATION AND PUBLIC OUTREACH POSITION

<b>Physics Outreach Coordinator</b> , McGill University Physics Matters	July 2018 - Dec 2019
<b>Scientific Consultant</b> Kurzgesagt – In a Nutshell Youtube Channel	Oct 2018 - Nov 2018
<b>Invited Seminar Speaker</b> , Marianopolis College Physics Seminar on Exoplanets	Oct 23, 2018
<b>Guest Lecturer</b> , McGill University PHYS 182: Our Evolving Universe	Sept 20, 2018
<b>Teaching Assistant</b> , McGill University PHYS 521: Astrophysics ( <i>Fall 2020</i> ) PHYS 186: Astrobiology - Activities Demonstrator and Marker ( <i>Winter 2018</i> ) PHYS 257: Experimental Methods 1 - Lab Instructor and Marker ( <i>Fall 2017</i> ) PHYS 214: Introduction to Astrophysics - Marker ( <i>Fall 2016</i> )	Sep 2016 - Present
<b>Guest Lecturer</b> , McGill University	Sept 21, 2017

## TALKS AND POSTERS

<b>Exoplanets 3</b> , <i>Poster</i> , Online	July 2020
<b>236th Meeting of the American Astronomical Society</b> , <i>Contributed Talk</i> , Online	June 2020
<b>Spitzer Legacy Conference</b> , <i>Poster</i> , Pasadena, CA	Feb 2020
<b>NASA JPL Astrophysics Seminar</b> , <i>Invited Talk</i> , Pasadena, CA	Feb 2020
<b>Extreme Solar System IV</b> , <i>Poster</i> , Reykjavík, Iceland	Aug 2019
<b>Exoclimes V</b> , <i>Poster</i> , Oxford University, Oxford, UK	Aug 2019
<b>ComSciConCAN</b> , <i>Poster</i> , McMaster University, Hamilton, ON	Jul 2019
<b>Women in Physics Canada 2019</b> , <i>Poster</i> , Montréal, QC	June 2019
<b>Canadian Astronomical Society Annual Meeting</b> , <i>Contributed Talk</i> , Montréal, QC	Jun 2019
<b>TEPS Summer School Workshop</b> , <i>Contributed Talk</i> , Toronto, ON	Jun 2019
<b>CRAQ Annual Meeting</b> , <i>Contributed Talk</i> , St-Alexis-des-Monts, QC	May 2019
<b>Physics and AI</b> , <i>Poster</i> , Montréal, QC	May 2019
<b>Future of Space Astronomy in Canada</b> , <i>Contributed Talk</i> , Montréal, QC	Nov 2018
<b>Cloud Academy</b> , <i>Poster</i> , Les Houches, France	Sep 2018
<b>Women in Physics Canada 2018</b> , <i>Contributed Talk</i> , Sherbrooke, QC	Jul 2018
<b>Exoplanets II</b> , <i>Poster</i> , Cambridge, UK	Jul 2018
<b>TEPS Summer School Workshop</b> , <i>Contributed Talk</i> , Vancouver, BC	May 2018
<b>CRAQ Annual Meeting</b> , <i>Contributed Talk</i> , St-Alexis-des-Monts, QC	May 2018
<b>IREx Annual Meeting</b> , <i>Invited Talk</i> , Université de Montréal, QC	Apr 2018
<b>Sagan Workshop: Microlensing in the Era of WFIRST</b> , <i>Poster</i> , Pasadena, CA	Aug 2017
<b>Greater IPAC Science Symposium</b> , <i>Contributed Talk</i> , Pasadena, CA	May 2017
<b>Exploring the Universe with JWST II</b> , <i>Poster</i> , Montréal, QC	Nov 2016
<b>Exoclimes IV</b> , <i>Poster</i> , Squamish, BC	Aug 2016

## PROFESSIONAL WORKSHOPS

<b>Microlensing 23 Hack Session</b> , New York City, NY	Jan 2019
<b>JWST Proposal Planning Workshop</b> , Pasadena, CA	Dec 2017
<b>21st International Microlensing Conference</b> , Pasadena, CA	Feb 2017
<b>Canadian Space Exploration Workshop</b> , Montréal, QC	Nov 2016
<b>Conférence Big Data et déjeuner-causerie</b> , Montréal, QC	Sep 2016
<b>CRAQ Summer School</b> , Montréal, QC	Aug 2016

## SELECTED OUTREACH ACTIVITIES & SERVICES

<b>Physics Outreach Coordinator</b> , Dept. of Physics, McGill	2018 - Present
<b>McGill Physics Hackathon Founder and Organizer</b> , Dept. of Physics	2016 - Present
<b>Local Organizer</b> , Women in Physics Canada Conference	2018 - 2019
<b>Co-Chair</b> , AstroMcGill, McGill University	2016 - 2019
<b>Lead Organizer of CRAQ Booth</b> , CRAQ & Éureka Festival	2018
<b>Volunteer at Physics Matter</b> , Dept. of Physics	2015 - 2018
<b>Open House Volunteer</b> , McGill University	2015 - 2017
<b>Volunteer at Explore JPL day</b> , NASA Jet Propulsion Lab	2017
<b>CEGEP Day Organizer</b> , Dept. of Physics, McGill University	2016

**Volunteer at ASTC Conference**, Association of Science-Technology Centers 2015  
**Organizer of the Physics Games**, Canadian Physics Games, McGill University 2014-2015

## **PUBLIC TALKS AND PANELS**

**Sun and Science: Why Physics Matters?** Jul 2020  
McGill University, QC

**Celebrating the Legacy of *Spitzer*** Jan 2020  
Dawson College and Planetarium Rio Tinto Alcan, Montréal, QC

**Fantastic Planets and Where to Find Them** Oct 2019  
Vanier College, Montréal, QC

**La Chasse aux MACHOs** Jul 2019  
Astrolab, Mont-Mégantic, QC

**STEM Support Group Panelist** Mar 2019  
McGill University, Montréal, QC

**Exoplanet Hunting 101** Oct 2018  
Marianopolis College, Montréal, QC

**Les petits MACHOs: à la recherche de planètes invisibles** Feb 2018  
Astronomie en Fût, Pub l'île Noire, Montréal, QC

**Comment trouverons-nous la vie ailleurs?** Nov 2016  
Cosmôdome, Laval, QC

## **SELECT MEDIA**

### **NEWS AND BLOG POSTS ABOUT MY WORK**

**Blowing the wrong way round? Westward winds on CoRoT-2b** 30/01/2018  
Astrobites

**A hot Jupiter with unusual winds** 28/01/2018  
Science Daily

**CoRoT-2b, l'exoplanète qui dérouté les astronomes** 26/02/2018  
SciencePost

**Des vents défient nos théories sur l'exoplanète CoRoT-2b** 23/01/2018  
Radio-Canada

**Weird Winds Blow the 'Wrong Way' on Scorching Hot Exoplanet** 23/01/2018  
Space.com

**Unexpected Discovery Challenges Scientists Understanding of Exoplanets** 22/01/2018  
Sci Tech Daily

**Puzzling finding raises new questions about atmospheric physics of giant planets** 22/01/2018  
Phys.org

**"Wrong-way" Winds on CoRoT-2b** 22/01/2018  
Spitzer Space Telescope