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**EDUCATION:**

* Ph.D. in Atmospheric Physics, University of Toronto [2014-current]
* M.Sc in Atmospheric Physics, University of Toronto [2013-2014]
* B.Sc. Honors including Specialist Program in Physics, Minor Program in Mathematics, and Environment & Energy, University of Toronto [2009-2013]

**PROFESSIONAL EXPERIENCES:**

* Graduate Research Assistant Fellowship, Department of Physics, University of Toronto [2013-current]
* Teaching Assistant Fellowship, Department of Physics, University of Toronto [2013-current]
* Undergraduate Research Fellowship, Department of Physics, University of Toronto [2011-2013]

**AWARDS AND HONORS:**

* Dean’s List on outstanding undergraduates, Faculty of Arts & Science, University of Toronto [2011-2013]

**PROFESSIONAL AFFILIATIONS:**

* Member: American Geophysical Union (AGU), Canadian Meteorological and Oceanographic Society (CMOS), Geos-Chem Adjoint modelling group, Environment and Climate Change Canada Carbon Assimilation research group

**OUTREACH ACTIVITIES:**

* Member of Noble Seminar and Lecture Series Committee at Department of Physics, University of Toronto [2015-current]
* Graduate representative of Health and Safety Committee at Department of Physics, University of Toronto [2013-current]
* Vice President- Academic of Physics and Astronomy Student Union in University of Toronto [2011-2013]
* Undergraduate representative of Health and Safety Committee at Department of Physics, University of Toronto [2011-2013]
* Member of Physics Mentorship Program [2013-2014]
* Member of Undergraduate Leadership Program held by National Center of Atmospheric Research (NCAR), Boulder [2012]
* Presenter:

- Science Rendezvous, city-wide event held in Toronto, ON. [2013-2015]

**PRESENTATIONS:**

ORAL PRESENTATIONS:

1. Zhang, X., Jones, D.B.A., Keller, M., Jiang, Z., Bourassa, A.E., Degenstein, D.A., Clerbaux, C., “Global CO emission estimates inferred from assimilation of MOPITT and IASI CO data, together with observations of O3, NO2, HNO3, and HCHO.”, *American Geophyhsical Union (AGU) Fall Meeting*, 2017.
2. Zhang, X., Jones, D.B.A., Keller, M., Walker, T.M., Jiang, Z., Henze, D.K., Bourassa, A.E., Degenstein, D.A., Ronchon, Y.J., “Global CO emissions Using Multiple Species Data Assimilation”, *Environment and Climate* *Change Canada Carbon Assimilation Workshop*, 2017.
3. Zhang, X., Jones, D.B.A., Keller, M., Walker, T.M., Jiang, Z., Henze, D.K., Bourassa, A.E., Degenstein, D.A.,

Ronchon, Y.J., “Global CO and NOx emissions Using Multiple Species Data Assimilation with GEOS-Chem Adjoint Model”, *the 8th* *International GEOS-Chem meeting*, 2017.

1. Zhang, X., Jones, D.B.A., and Keller, M., “Global CO and NOx emissions Estimated by Joint Assimilation of MOPITT CO, TES O3, OSIRIS O3 and OMI NO2”, *Brewer-Wilson Seminar*, Department of Physics, University of Toronto, 2016.
2. Zhang, X., Kushner, P.J., and Laliberte, F., “Extratropical cyclone tracking interpreted by Sea Level Pressure”,

*Canadian Undergraduate Physics Conference*, 2012.

1. Zhang, X., Kushner, P.J., and Laliberte, F., “A brief analysis of extratropical cyclone tracking algorithms”, *Centre* *for Global Change Science (CGCS) Undergraduate Internship Presentations*, University of Toronto, 2011.
2. Jones, D.B.A., Zhang, X., Keller, M., Walker, T.M., Jiang, Z., Henze, D.K., Bourassa, A.E., Degenstein, D.A., Ronchon, Y.J., “Quantifying emissions of CO and NOx using observations from MOPITT, OMI, TES, and OSIRIS”, *Second Workshop on Atmospheric Composition Observation System Simulation Experiments (OSSEs)* *held by European Centre for Medium-Range Weather Forecasts (ECMWF)*, 2016.

POSTERS:

1. Zhang, X., Jones, D.B.A., Keller, M., Walker, T.M., Jiang, Z., Henze, D.K., Bourassa, A.E., Degenstein, D.A., Ronchon, Y.J., “Quantifying emissions of CO and NOx using observations from MOPITT, OMI, TES, and OSIRIS”, *American Geophyhsical Union (AGU) Fall Meeting*, 2016.
2. Zhang, X, Jones, D.B.A., and Keller, M., “Multiple Species Data Assimilation on CO and NOx emissions using

MOPITT CO, TES O3 and OMI NO2.”, *the 7th* *International GEOS-Chem meeting*, 2015.

**PUBLICATIONS:**

1. Zhang, X., Jones, D.B.A., Keller, M., Walker, T.M., Jiang, Z., Henze, D.K., Bourassa, A.E., Degenstein, D.A., Ronchon, Y.J., (2018), “Quantifying emissions of CO and NOx using observations from MOPITT, OMI, TES, and OSIRIS”, *Journal of Geophysical Research: Atmosphere*.
2. Zhang, X.., Jones, D.B.A., Keller, M., Jiang, Z., Bourassa, A.E., Degenstein, D.A., Clerbaux, C., “Chemical reanalysis on CO and NOx emissions using multi-species chemical data assimilation in 2016-2017.”, *Journal of Geophysical Research: Atmosphere,* in draft.
3. Kaiser, J., Jacob, D., Zhu, L., Travis, K.R., Fisher, J.A., Abad, G.G., Zhang, L., Zhang, X., (2017), “High-resolution inversion of OMI formaldehyde columns to quantify isoprene emission on ecosystem-relevant scales: application to the Southeast US.”, Atmospheric Chemistry and Physics.