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PRESENTATIONS & APPEARANCES

I have given numerous presentations on the work being done by me and my collaborators to the scientific community and the public along with providing lectures and tutorials and participating in panel discussions. The list below is mostly complete beyond 2022 (the beginning of my tenure as a faculty member) and modestly complete before then (2011-2022).

Invited Talks

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| NSF IAIFI Summer Workshop
Uncertainty and Interpretability in Machine Learning Models | August 2023 |
| MaxEnt 2023 Workshop
Frontiers of Nested Sampling Meeting-within-a-Meeting
Musings on Nested Sampling from Interactions with Everyday Users | July 2023 |
| Statistical Challenges in Modern Astronomy VIII
Extending Bayesian Modeling Approaches to ML Applications | June 2023 |
| IAU General Assembly 2022
Machine Learning in Astronomy: Possibilities and Pitfall
Incorporating Errors into Machine Learning Methods | August 2022 |
| UCLA IPAM
Mathematical and Computational Challenges in the Era of Gravitational Wave Astronomy
An Introduction to (Dynamic) Nested Sampling | November 2021 |
| University of Surrey
Towards a Cross-Research Platform for Hosting Bayesian Data-Fitting Tools
Keynote Address: An Introduction to Nested Sampling | July 2021 |
| Harvard University
CMSA Big Data Conference
Revealing the Milky Way's Dust-iny | August 2018 |

Colloquia & Seminars

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| Carnegie Mellon University | September 2023 |
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STAMPS Seminar Nested Sampling: Past, Present, and Future	
University of Pittsburgh Astronomy Seminar From Panchromatic Images to Stellar Ages and Beyond	September 2023
Center for Astrophysics Harvard & Smithsonian AstroAI Seminar Extending Statistical Thinking to ML Applications	August 2023
McMaster University Astronomy Lunch Seminar From Panchromatic Images to Stellar Ages and Beyond	April 2023
University of Waterloo Astroseminar From Panchromatic Images to Stellar Ages and Beyond	February 2023
NRC Herzberg Astronomy and Astrophysics Research Centre Colloquium Galaxy Evolution through the Eyes of the Milky Way	November 2022
Queen's University Astronomy Seminar Galaxy Evolution through the Eyes of the Milky Way	November 2022
Institute for Advanced Study Astrophysics Seminar From Panchromatic Images to Stellar Ages and Beyond	August 2022
Saint Mary's University Department of Astronomy and Physics Colloquium More Data + More Parameters = More Fun with Galaxy Evolution	August 2022
CASCA CANadian Virtual Astronomy Seminar (CANVAS) Mapping the Milky Way Near and Far	April 2022
IAU-IAA Astrostats and Astroinfo Seminar Statistical Challenges in Stellar Parameter Estimation from Theory and Data	April 2022
Saint Mary's University Data Analytics Seminar An Introduction to (Dynamic) Nested Sampling	January 2022
University of Toronto	October 2021

Toronto Data Workshop Stars, Galaxies, and Everything In-Between: Galaxy Evolution Near and Far with Large Datasets	
Penn State University Department of Astronomy and Astrophysics Colloquium Mapping the Milky Way with Stars and Dust	September 2021
University of Chicago Kavli Institute for Cosmological Physics Seminar Cosmological Cartography with Photometric Redshifts	April 2021
CANSSI Ontario Data Science Applied Research and Education Seminar Mapping the Milky Way in the Age of Gaia	February 2021
University of Florida Department of Astronomy Colloquium Enabling Data-Driven Discovery in the Milky Way and Beyond Using Large Astronomical Datasets	September 2020
Villanova University Department of Astrophysics and Planetary Science Colloquium Exploring the Galaxy Near and Far in the Age of Gaia	October 2019
Harvard University Summer Colloquium (joint with Catherine Zucker) Charting Nearby Molecular Clouds with Gaia: A New Map of Our Local Interstellar Medium	June 2019
University of Cambridge Data Intensive Science Seminar Mapping the 3-D Distribution of Dust in the Milky Way with Stellar Photometry	April 2019
UMass Amherst Data Science Tea Big Data Inference: Using Hierarchical Bayes and Machine Learning to Improve Photometric Redshifts	October 2017
Harvard University CHASC Astrostatistics Seminar An Introduction to Dynamic Nested Sampling	September 2017
Kavli IPMU Astronomy Lunch Seminar Mapping, Visualizing, and Exploiting the Color-Redshift Relation	March 2016

University of Tsukuba August 2013
 Theoretical Astrophysics Seminar
 The Evolution of Star-Forming Galaxies over Cosmic Time

Contributed Talks

University of Michigan August 2023
 2023 Clusters & Streams Workshop
 Rapid Stellar Parameter Inference with Probabilistic Machine Learning

JSM 2023 August 2023
 True North Strong and... Amazing at Astrostatistics! (Invited Paper Session)
 Connecting Galaxy Evolution between Observation, Simulation, and Theory

Dunlap Institute for Astronomy & Astrophysics June 2023
 15th Anniversary Homecoming Celebration Spotlight Talk
 Uncovering Galaxy Evolution through the Eyes of the Milky Way at the Dunlap Institute

Surveys to Discovery (S2D) Conference May 2023
 Photometric Biases in Modern Surveys

2023 Spring Research Conference (SRC) May 2023
 From Light to Mass and Back Again: Exploring Galaxy Evolution with “New” Methods
 and “Old” Outcomes

McMaster University August 2022
 2022 Clusters Workshop
 Panchromatic Modelling of Co-Eval Stellar Populations

JSM 2022 August 2022
 Advances in Astrostatistics in the Great White North (Invited Paper Session)
 Mapping the Milky Way in 5-D with Big Data

Seeing the Future: A Conference in Honour of Alyssa Goodman May 2022
 Machine Learning in the Era of Astronomically Big Data

AAS 238 June 2021
 Special Session (Statistics Discussant)
 Unaccounted Uncertainties: The Role of Systematics in Astrophysics

JSM 2020 August 2020
 Astrostatistics Interest Group: Student Paper Award (Topic-Contributed Paper Session)
 Photometric Biases in Modern Astronomical Surveys

Lorentz Center: Colours of the Universe Workshop September 2018
 Challenges Working with Posterior Distributions (with Alex Malz)

COSMO21 2016 May 2016

Improving Photometric Redshifts for Hyper Suprime-Cam

Lectures & Tutorials

2023 ESO Conference Two in a million – The interplay between binaries and star clusters Machine Learning for Star Cluster Science	September 2023
University of Michigan 2023 Clusters & Streams Workshop Dimensionality Reduction: Applications to Star Cluster Science	August 2023
NSF IAIFI Summer School Uncertainty and Interpretability in Machine Learning Models (with Alex Gagliano)	August 2023
Statistical Challenges in Modern Astronomy VIII A Tutorial of (Dynamic) Nested Sampling	June 2023
Astro Hack Week 2020 Introduction to Bayesian Inference with Linear Regression	August 2020

Panels

NSF IAIFI Summer School Career Panel	August 2023
Dunlap Institute for Astronomy & Astrophysics 15 th Anniversary Homecoming Celebration From Dunlap to Diverse Careers: A Panel Discussion on Opportunities and Challenges for Astrophysics Graduates (Moderator)	June 2023

Posters

2023 ESO Conference Two in a million – The interplay between binaries and star clusters A machine-learning led search for extra-tidal stars of globular clusters	September 2023
2022 CASCA Annual General Meeting Data Driven Stellar Spectral Modelling with GSPICE	May 2022
2021 CASCA Annual General Meeting Deriving Stellar Properties, Distances, and Reddenings from Photometry (and Astrometry) with brutus	May 2021
Bayes Comp 2018 Dynamic Nested Sampling with <i>dynesty</i>	March 2018
AAS 229	January 2017

Improving Photometric Redshifts for Hyper Suprime-Cam (HSC) with Hierarchical Bayes and Machine Learning

AAS 223 January 2014

Parallel Galaxy Main Sequence and Quasar Evolution from $z=0-6$
(AAS Chamblis Award Honorable Mention)

AAS 221 January 2013

An In-Depth Analysis of the Kepler Low-Amplitude Blazhko RR Lyrae Stars: First Steps and Comparing Data Reduction Methods

2012 KASC Meeting June 2012

An In-Depth Analysis of the Kepler Low-Amplitude Blazhko RR Lyrae Stars: First Steps and Comparing Data Reduction Methods

AAS 219 January 2012

The X-ray Counterpart of the High-B Pulsar J0726-2612
(AAS Chamblis Award)

Public Talks & Events

Astronomy on Tap (Toronto) November 2022

Mapping the Milky Way from the Inside Out

RASC (Toronto Centre) October 2021

Speaker's Night

Mapping the Milky Way in the Age of Gaia

RASC (Ottawa Centre) June 2021

Monthly Meeting

Mapping the Milky Way in the Age of Gaia

GitHub Satellite 2019 May 2019

Keynote participant for open-source code contributions (*dynesty*) in the analysis of M87* by the EHT collaboration

Media Appearances

CBC Calgary January 2022

Calgary Eyeopener with David Gray, Angela Knight

Radio Interview: "Space bubble" ([link](#))