Maryum Sayeed

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Education

Columbia University 2021 – Present
Graduate Student

University of British Columbia 2015 – 2020
B.Sc in Honors Physics & Astronomy

- Thesis: "Axion Quark Nuggets: Using Gamma-ray and X-ray Observations of Galaxy Clusters to Detect Dark Matter"

Appointments

Institute for Astronomy, University of Hawai'i June 2020 – Present
Advisor: Prof. Daniel Huber | Topic: Asteroseismology

University of British Columbia Sep 2019 – May 2020
Advisor: Prof. Jess McIver | Topic: Gravitational Waves

Institute for Astronomy, University of Hawai'i May 2019 – Aug 2019
Advisors: Prof. Daniel Huber & Prof. Melissa Ness | Topic: Machine Learning

Herzberg Astronomy & Astrophysics Research Centre Jan 2019 – Apr 2019
Advisor: Dr. Nienke van der Marel | Topic: Planet Formation

Institute for Research on Exoplanets May 2018 – Aug 2018
Advisor: Prof. Jason Rowe | Topic: Solar System Seismology

Honors

BSc with Distinction, University of British Columbia 2020
Dean's Honour List, University of British Columbia 2020
Dean's Honour List, University of British Columbia 2019
Rhodes Scholar (Nominated), University of British Columbia 2019
Trottier Excellence Grant, Institute for Research on Exoplanets 2018
Choquette Family Foundation Global Award (declined), University of British Columbia 2018
Alexander Rutherford Scholarship, Government of Alberta 2015

Publications

[1] **M. Sayeed**, D. Huber, A. Wheeler, and M. K. Ness, "The Swan: Data-driven Inference of Stellar Surface Gravities for Cool Stars from Photometric Light Curves", The Astronomical Journal, vol. 161, no. 4, 170, p. 170, Apr. 2021. arXiv: 2011.10062 [astro-ph.SR].

Teaching & Outreach

Undergraduate Teaching Assistant at University of British Columbia	2018 – 2019
Youth City Lead at MYN Calgary	2020 – 2021
VP External at UBC Astronomy Club	2015 – 2020
VP Academic at UBC Physics Society	2016 – 2017

Talks

"Glitch-PE: impact of glitches on parameter estimation of GW signals", LIGO Group Meeting, May 2020

"Inference of Stellar Parameters Using Data-Driven Modelling", Institute for Astronomy, Aug 2019

"Modelling multi-wavelength observations of protoplanetary disk IRS 48", National Research Council of Canada, Apr 2019

"Hunt for Solar Oscillations – K2 Observations of Uranus", Institute for Research on Exoplanets, Aug 2018

Posters

Sayeed, M, "Data-Driven Inference of Stellar Surface Gravities for Cool Stars from Photometric Light Curves", American Astronomical Society Winter Meeting (237), Jan 2021

Sayeed, M, "The Gravity of Machine Learning: Using Linear Regression to Infer Stellar Surface Gravity", CASCA 2020, May 2020

Sayeed, M, "Inference of Stellar Parameters Using Data-Driven Modelling", American Astronomical Society Winter Meeting (235), Jan 2020

Conferences & Workshops

AAS 237, American Astronomical Society	Jan 2021
Exoplanet Demographics Conference, NASA Exoplanet Science Institute	Nov 2020
Sagan Exoplanet Summer Workshop, NASA Exoplanet Science Institute	Jul 2020
National Undergraduate Big Data Challenge, STEM Fellowship	Jun 2020
CASCA 2020, York University,	Mar 2020
AAS 235, American Astronomical Society,	Jan 2020
Better Stars, Better Planets: Exploiting the Stellar-Exoplanetary Synergy, KITP, UCSB	May 2019
Planet-Star Connections in the Era of TESS and Gaia, KITP, UCSB	May 2019
Conference for Undergraduate Women in Physics, University of Washington	Jan 2019
Astro NWxSW, University of British Columbia	Nov 2018

Industry

Ernst & Young Oct 2020 – Present
Consultant specializing in Data Analytics, Digital & Emerging Technologies

Sony Pictures Imageworks Jun 2017 – Dec 2017
Systems Engineer