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Prince Bhaura

Curriculum Vitaé

Website: astroprince.github.io
GitHub: github.com/astroprince
Email: prince.bhaura@mail.utoronto.ca

Research Interests

Particle & Astro-Particle Physics; Dark Matter Direct Detection, Neutrinos

Education

H.B.Sc., Astronomy & Physics Specialist, University of Toronto (UofT) Sept 2017 – June 2021

Publications

1. J. L. West, J. L. Campbell, **P. Bhaura**, et al., "*Discovery of a Peculiar Filamentary Structure Connected to the Coherent Magnetic Field in the Outer Galaxy,*" 2022, ApJ, 941, 6 (13 pages)

Research Experience

Undergraduate

2023 – 2024 **Undergraduate Physics Project**, UofT
"*Machine Learning Algorithms to Determine the Sensitivity of the Dune Detector to Detect Tau Neutrinos*" supervised by Prof. Nikolina Ilic & William Dallaway.
Link to GitHub

2021 – 2022 **Undergraduate Research Assistant (Part-Time)**, UofT
"*Discovery of a Peculiar Filamentary Structure Connected to the Coherent Magnetic Field in the Outer Galaxy*" supervised by Dr. Jennifer West.
2022, ApJ, 941, 6 (13 pages)

2020 – 2021 **Undergraduate Astronomy Project**, UofT
"*What Local Magnetic Fields Can Teach Us About A Possible Supernova Remnant (G182.5-4.0)*" supervised by Dr. Jennifer West, Dr. Jessica Campbell, & Prof. Bryan Gaensler.
Link to GitHub

Talks & Presentations

Presentations

Mar 2024 **Undergraduate Physics Project**; UofT (*virtual*)

Nov 2023 **DUNE Collaborators Meeting**; UofT (*virtual*) [Slides]

Apr 2021 **Undergraduate Astronomy Project**; UofT (*virtual*) [Slides]

Extracurricular Activities

Academic Service

2017 – 2020 **Physics Student Union (Junior Member)**, UofT
2018 **Volunteer Note Taker**, Accessibility Services, UofT
2017 – 2018 **University of Toronto Amateur Astronomer's Society (Junior Member)**, UofT

Programs

2022 **GUINEAPIG Workshop on Light Dark Matter**, TRIUMF (*virtual*)
2022 **Summer Particle Astrophysics Workshop**, Arthur B. McDonald Research Institute (*virtual*), (link)
2021 **ACT Data School**, UofT (*virtual*), (link)
2020 – 2021 **Undergraduate Mentorship Program**, Dunlap Institute, UofT (*virtual*)