Centre for High Performance Computing 2023 National Conference



Contribution ID: 18 Type: Invited Talk

Machine Learning in Cosmology

Tuesday, 5 December 2023 13:30 (20 minutes)

Cosmology, the understanding of the evolution of entire Universe, has progressed very fast in the past several decades with the advances of modern telescopes. I will give a brief overview of the modern cosmology of the last century and highlight its phenomenal successes and distinctive challenges. I will then explain how and why the use of Machine Learning technique can help unravel these mysteries and exploit the uncharted territories of the early Universe. In particular, I will give several cases of using machine learning to constrain primordial non-Gaussian fluctuations in the cosmic microwave background radiation, and studying the epoch of reionization.

Student or Postdoc?

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