Junqi Zhang

Education

University of Wisconsin - Madison

PhD in Physics

Madison, WI

Started Aug. 2025

University of Wisconsin - Madison

BS in Physics and Philosophy

Madison, WI

Jan. 2023 - May. 2025

Research Interest

Early universe cosmology, particularly inflationary physics, reheating and associated observables.

Research Experience

Inflationary Cosmology

Madison, WI

Advisor: Prof. Daniel Chung

Mar 2024 - Sep 2024

- **Cosmological Perturbation**: Reproduced the basic results of the linear order cosmological perturbation with multiple scalar fields under uniform curvature gauge.
- **Isocurvature Perturbation**: Investigated double monodromy inflation model and embedded the monodromy axion model into the isocurvature perturbation with realistic parameters as the dominant inflaton with a superheavy dark matter spectator. Computed spectator perturbation spectrum in the superhorizon region.

Teaching Experience

TA for Physics 207: General Physics I (Fall. 2025)

Skills

Languages: Mathematica, Julia, Python