UNL Department of Physics and Astronomy presents:

The First Picosecond and the Dark Secrets of the Universe

PRESENTED BY
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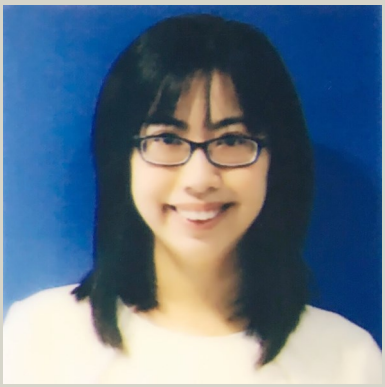

THURSDAY
OCTOBER 6
4:00 PM
IN JH 136

Refreshments will be served in the JH 1st Floor Vending Area at 3:30

ABSTRACT

The study of cosmic phase transitions (PTs) is of central interest in modern cosmology. Cosmic PTs could have a variety of essential roles in the evolution of the Universe, from creating matter-antimatter asymmetry to forming dark matter and primordial black holes, and generating a potentially observable background of gravitational radiation. The study of cosmic PTs offers compelling opportunities to advance our understanding of the origin of cosmic structure. The rapidly developing gravitational wave and collider experiments provide exciting possibilities for direct and indirect probes of cosmic PTs. In this talk, I will focus on the possible cosmic PT during the first picosecond after the big bang, and their roles in solving some of the fundamental mysteries of the Universe.