

Tuesday, April 16, 2024

11:00am–11:45am

Jessie Shelton CAS Fellow 2019–20, Physics

Gravitational Footprints of Dark Particle Physics in the Very Early Universe



The earliest direct probes of our universe come from the abundance of light elements, which started forming when the universe was about a second old. What happened in the second before that remains one of the biggest outstanding questions in both cosmology and particle physics. Professor Shelton will talk about

recent work developing subtle fossil footprints of processes that could have happened at earlier times and discuss how future observations of dark matter and gravitational waves may help us look back into the baby universe.

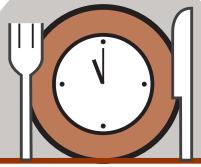
Noon-12:45pm

Prashant Jain CAS Associate, 2022–23, Chemistry

Path of a Photon in Artificial Photosynthesis



This presentation will follow the path of a photon as it goes from being emitted from a light source to being stored in a chemical bond. Professor Jain's research group is leveraging this understanding for the artificial photosynthesis of fuels and green manufacturing of chemicals.



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