Stanford



Joshua Frieman

Professor of Particle Physics and Astrophysics and, by courtesy, of Physics

Bio

BIO

I carry out theoretical and observational research in cosmology on topics including dark energy, dark matter, and inflation, using tools such as large-scale structure, gravitational lensing, and supernovae, with increasing focus on the application of machine learning to the analysis of cosmic surveys. Cosmology is akin to archaeology on the grand scale: as an archaeologist uses pottery shards to reconstruct an ancient civilization and how it evolved, cosmologists use both small- and large-scale data to reconstruct the origin and evolution of the universe and to probe fundamental physics.

ACADEMIC APPOINTMENTS

- Professor, Particle Physics and Astrophysics
- Professor (By courtesy), Physics

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

David Shlivko

Doctoral Dissertation Advisor (AC)

Lyla Choi, Ben Sherwin, Roy Zhao