



The James Webb Space Telescope: Shedding light on Dark Matter and Dark Energy

Public Astronomy Lecture – Tuesday, Dec. 6, at 7pm PST

The Universe is 95% “dark.” What do we currently know about dark matter and dark energy, and how will the first data from the legendary James Webb Space Telescope deepen our understanding? Join our lecture to learn what new insights we are gaining into cosmology!

- **Date:** Tuesday, Dec. 6, 2022
- **Time:** 7:00-8:00 PM PST
- **Location:** [Bishop Auditorium](#) (Stanford) and YouTube. The event URL can be found at the **bottom** of the EventBrite registration confirmation email.
- **Title:** The James Webb Space Telescope: Shedding Light on Dark Matter & Dark Energy
- **Speaker:** Dr. Simon Birrer (KIPAC/Stanford University)
 - *With the James Webb Space Telescope (JWST), cosmologists now have a power tool in their hands to look deeper into the mysteries of our Universe than ever before. In this lecture, Dr. Birrer will lay out outstanding questions in cosmology and describe how JWST is uniquely positioned to advance our current understanding of dark matter and dark energy. Specifically, he will discuss how JWST will probe dark matter based on its impact on galaxy formation and from the observed gravitational lensing effect caused by this mysterious matter component. Dr. Birrer will also highlight key programs that utilize JWST to measure the Hubble constant, a parameter to characterize the expansion of the Universe. He will close the talk by previewing some early results from JWST, which the scientific community and the general public are eagerly awaiting.*
- **Tickets:** Free but RSVP is required through [EventBrite](#) (Note: school-district email addresses and other work emails with firewalls may block the EventBrite messages)
- **Information:** Dr. Xinnan Du at xinnandu@stanford.edu
- **Event website page:** <https://goto.stanford.edu/jwst-cosmology>