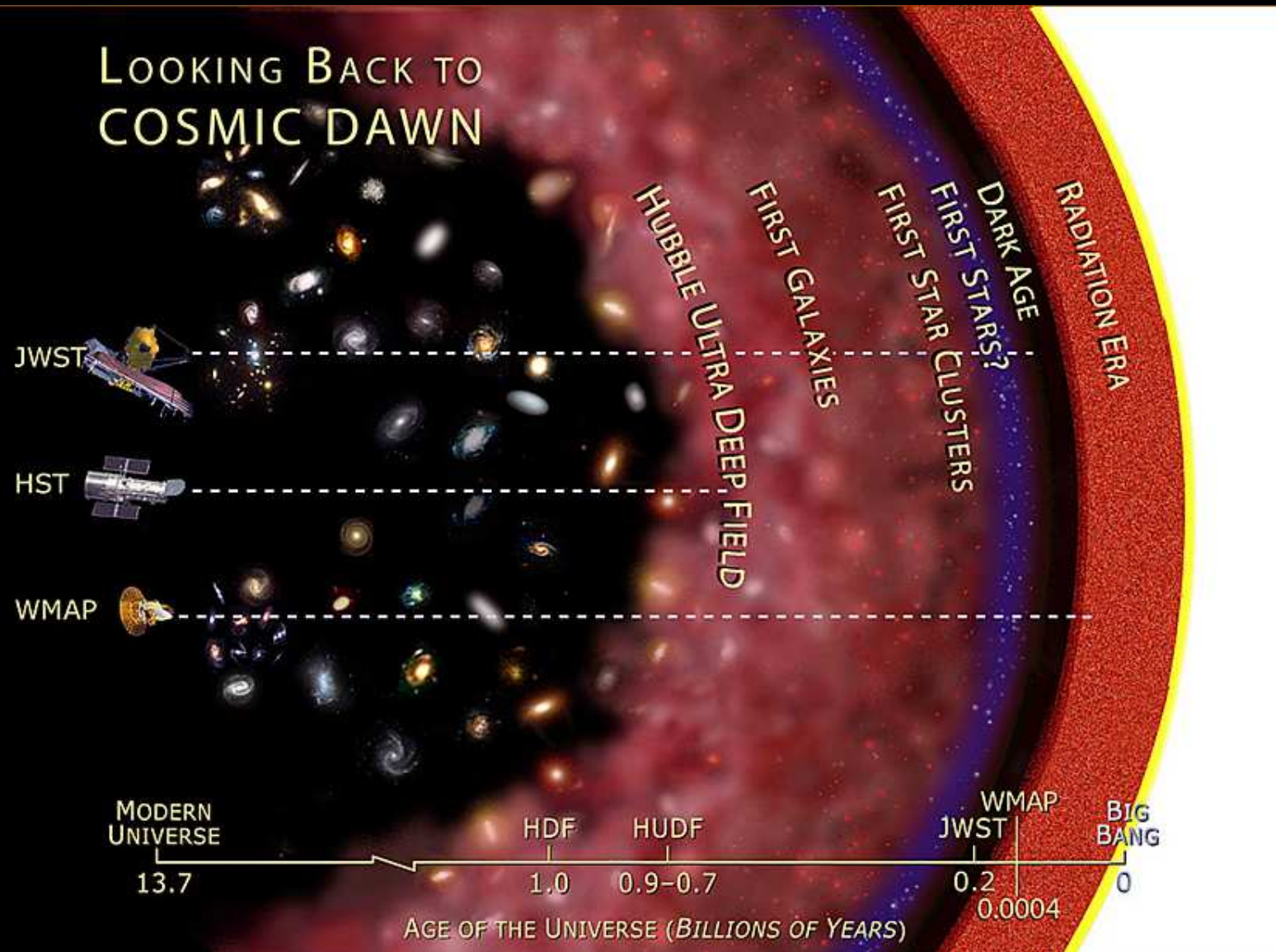


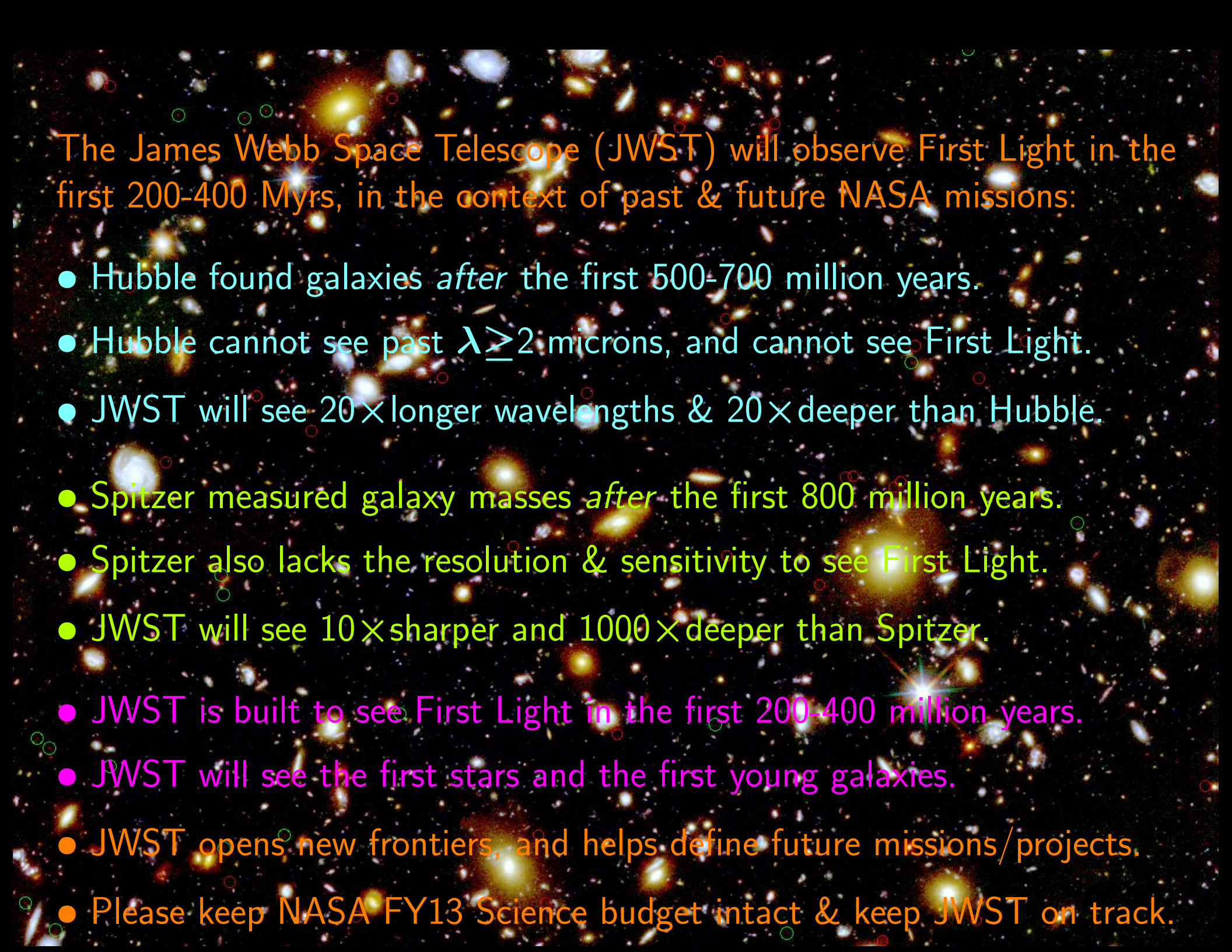
Webb will measure the epochs of First Light and galaxy assembly:



Hubble: Hubble sequence & galaxy evolution *after* the first 600 Myrs.

JWST: First Light and galaxy assembly *during* the first 200-400 Myrs.

WMAP: Snapshot of neutral Hydrogen forming 0.38 Myr after Big Bang.



The James Webb Space Telescope (JWST) will observe First Light in the first 200-400 Myrs, in the context of past & future NASA missions:

- Hubble found galaxies *after* the first 500-700 million years.
- Hubble cannot see past $\lambda \geq 2$ microns, and cannot see First Light.
- JWST will see 20× longer wavelengths & 20× deeper than Hubble.
- Spitzer measured galaxy masses *after* the first 800 million years.
- Spitzer also lacks the resolution & sensitivity to see First Light.
- JWST will see 10× sharper and 1000× deeper than Spitzer.
- JWST is built to see First Light in the first 200-400 million years.
- JWST will see the first stars and the first young galaxies.
- JWST opens new frontiers, and helps define future missions/projects.
- Please keep NASA FY13 Science budget intact & keep JWST on track.