



LUVOIR

LARGE UV / OPTICAL / INFRARED SURVEYOR

Study Lead Center : Goddard Space Flight Center

Study Scientist : Aki Roberge (GSFC)

Large Mission Concept Studies Kick Off

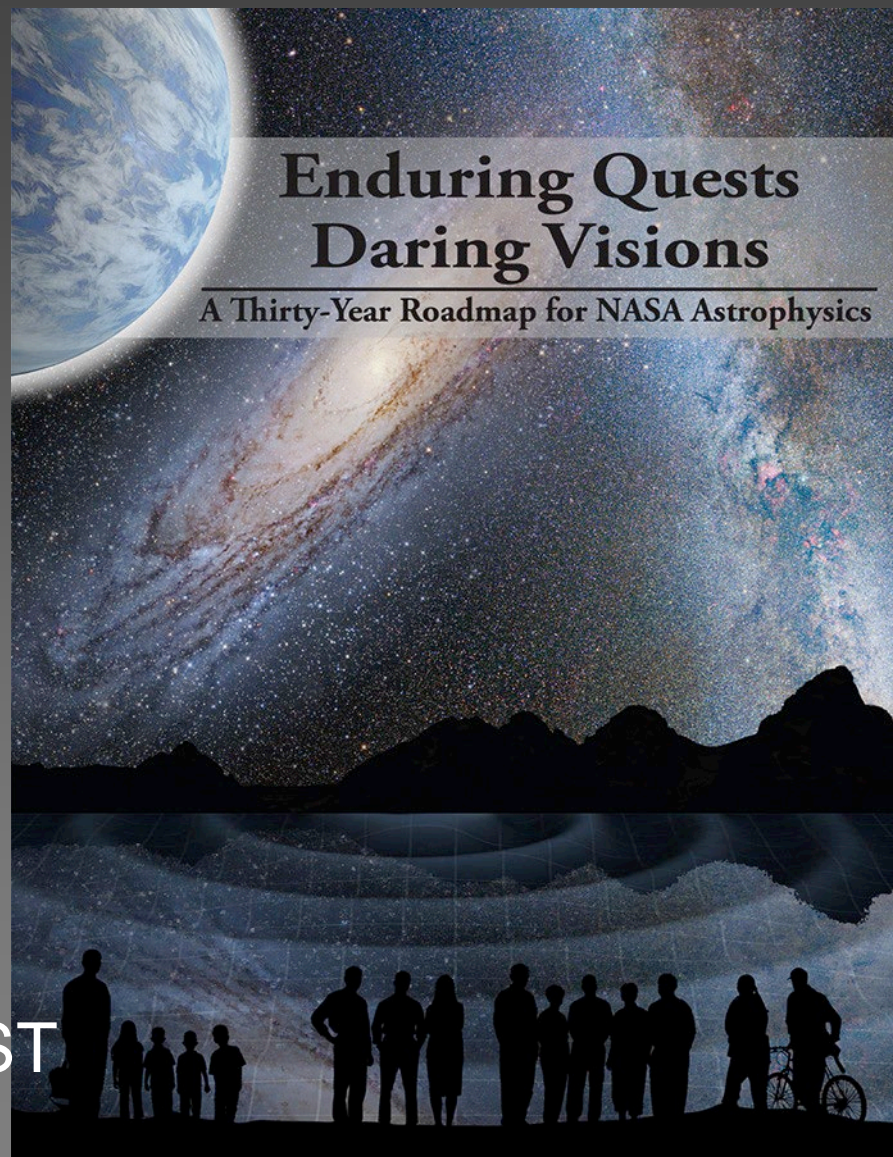
AAS 227th Meeting

Kissimmee, Florida

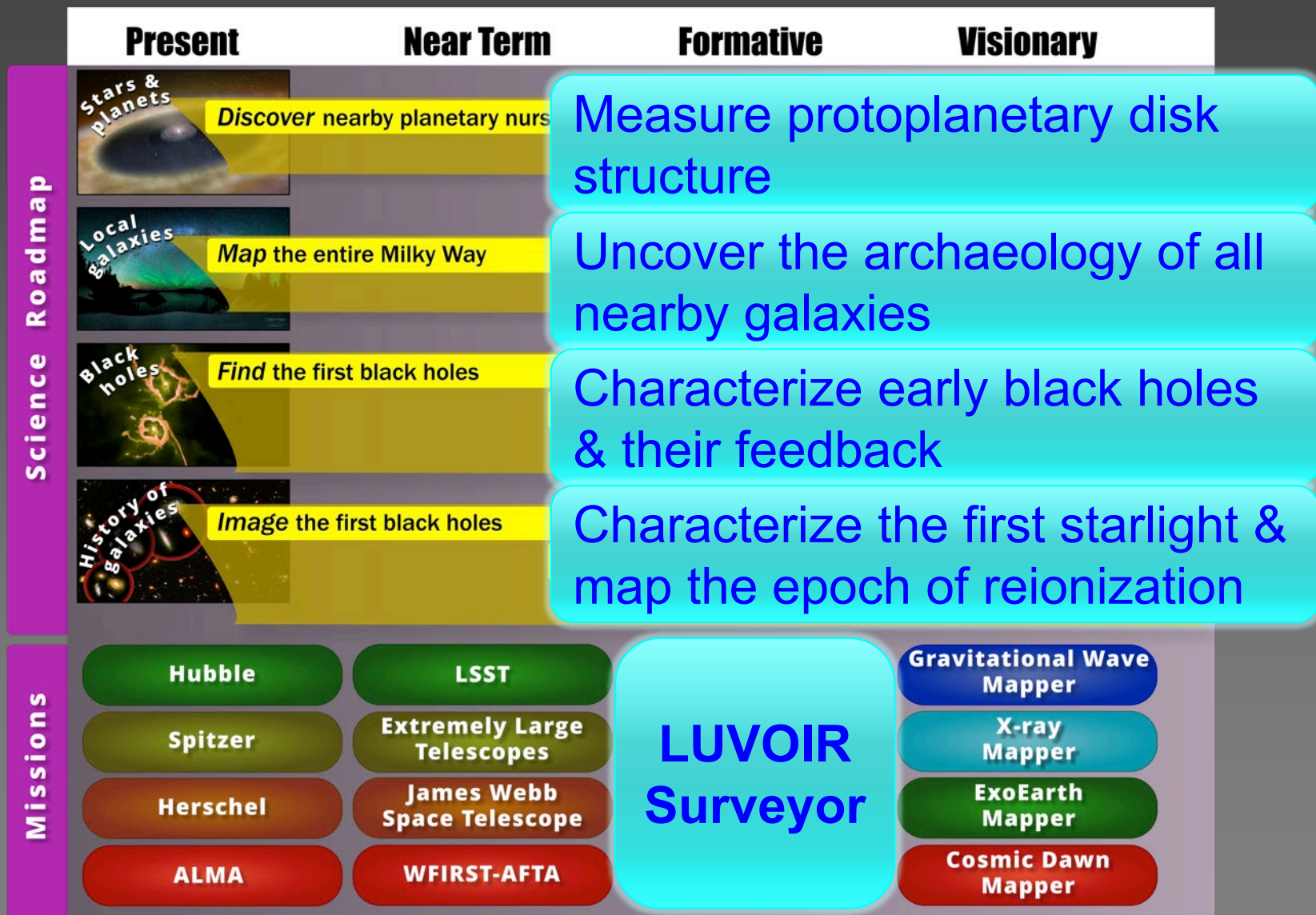
January 6, 2016

What is LUVOIR ?

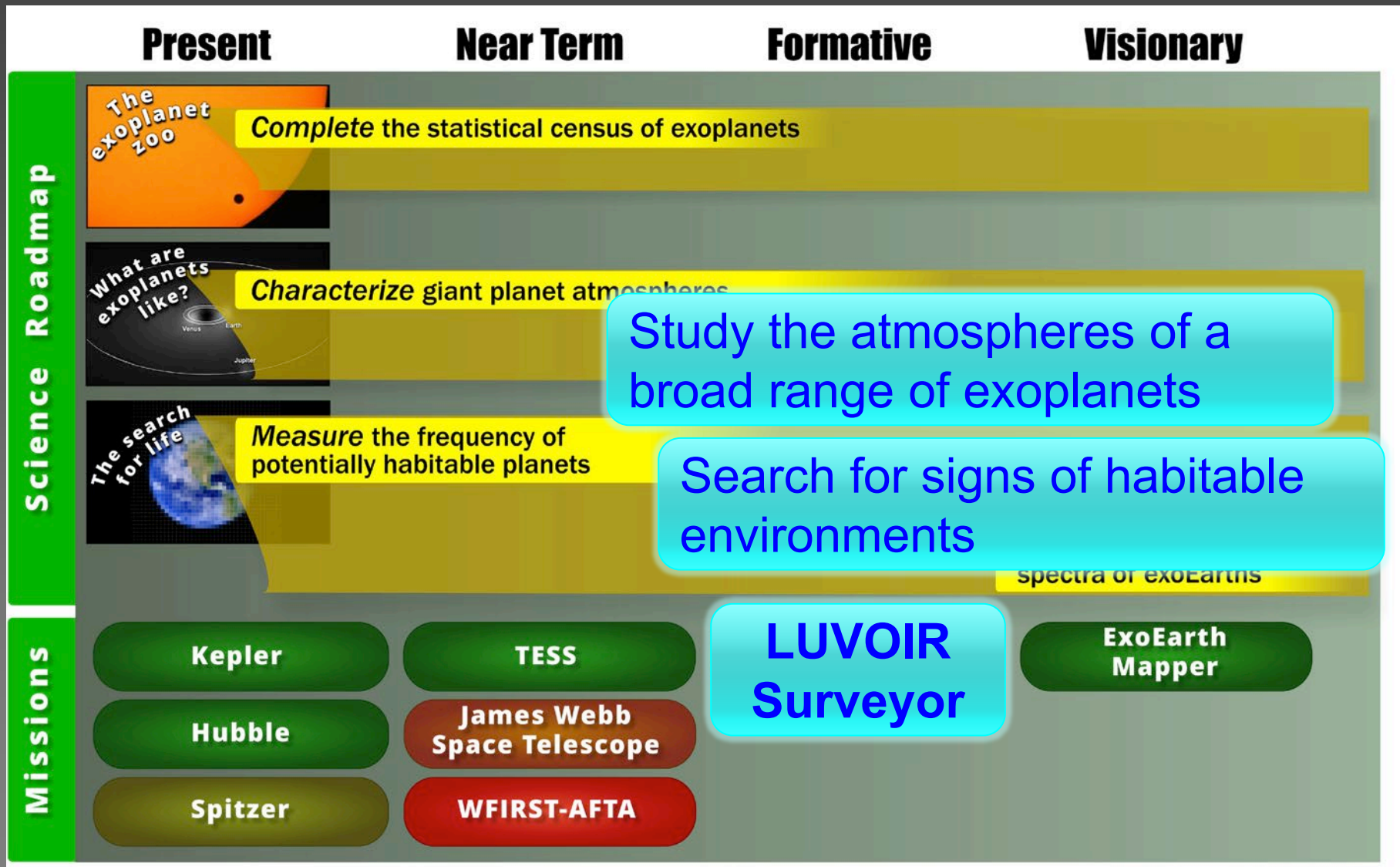
- General purpose, multi-wavelength observatory with broad science capabilities
- Born out of the 2013 Astrophysics Visionary Roadmap
 - Other LUVOIR-like concepts: ATLAST, HDST



Leap forward in cosmic origins science



Leap forward in **exoplanet** science



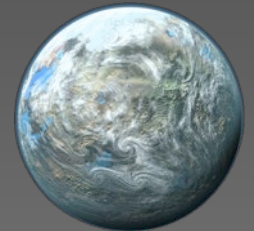
LUVOIR as envisaged by the PAGs



⦿ **Notional !** – all to be determined by the STDT

⦿ Primary science goals

- Broad range of cosmic origins science
- Direct imaging of Earth analogs, search for biosignatures



⦿ Capabilities

- FUV to NIR wavelength sensitivity
- Some suite of imagers and spectrographs
- High-contrast capability ($\sim 10^{-10}$)
- Aperture diameter of order 8 – 16 m

Lots to do ... We need you !

**APPLICATIONS FOR STDT MEMBERSHIP
DUE FEB 1**