

# LUVOIR LARGE UV / OPTICAL / INFRARED SURVEYOR

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Large Mission Concept Studies Kick Off AAS 227<sup>th</sup> 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

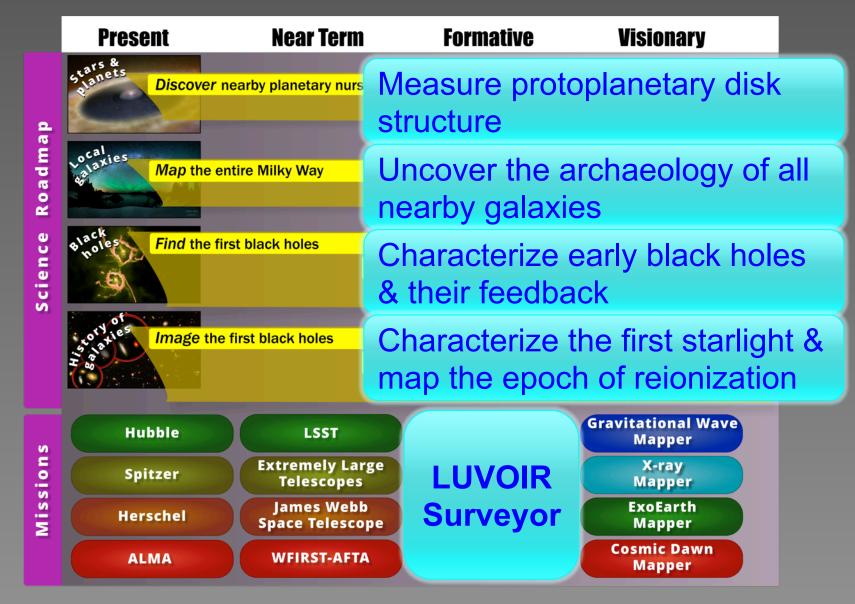


#### Enduring Quests Daring Visions

A Thirty-Year Roadmap for NASA Astrophysics

### Leap forward in cosmic origins science

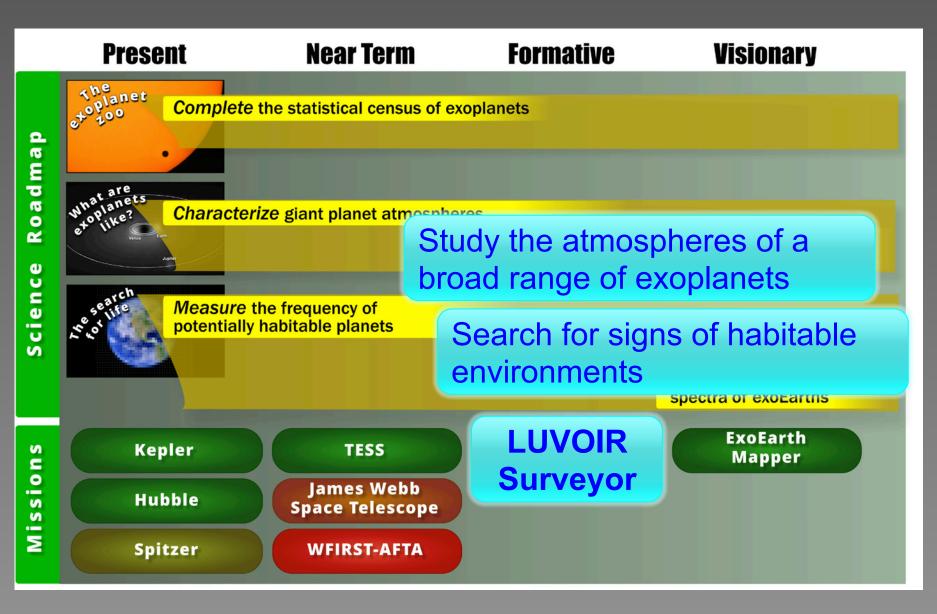




LUVOIR @ Large Mission Concept Studies Kick Off - Jan 6, 2016

#### 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