

# Flagship Subcommittee Breakout

Summary of Goals and Agenda

# Our Goals

- mirror technologies for large aperture (10m+) in space, and what is the right size for a flagship-class mission?
- coatings for large apertures
  - that deliver requirements for the UV
  - that deliver required performance for coronagraphic instrumentation
- compelling astrophysics science for the UV-visible that requires a large aperture to be done
- the role exoplanet science has to play in our considerations
- what technologies do we need to develop to truly take advantage of such a large aperture and that need investment to make happen?
  - spectrographs
  - detectors for large focal plane arrays
  - detectors that are highly efficient at UV wavelengths
  - multiplexing - microshutters, image slicers, etc.
- spacecraft level developments such as deployable structures, robotic servicing and stability
- what efforts need to be made to solicit and foster community support for such a mission?
  - when they should be made and by whom?
- is the pursuit of a flagship for the UV-visible in the best interests of the field?

# Our Agenda and Schedule – Technology and Development

- Large Mirror Technologies - Gary Matthews (Exelis)
- Flagship-class Observatory Infrastructure - Ron Polidan (Northrup Grumman)
- Mirror Coating Technology Advances - Juan Larruquert (CSIC, Spain)
- Enabling Instrument Technologies for a Flagship UVOIR mission - John Vallergera (UC Berkeley)
- Fostering Support for a UV-visible Flagship with the Community and the General Public - Mark Clampin (GSFC)
- Discussion

# Our Agenda and Schedule – Science that can only be done by a Flagship

- [with the Science Subcommittee]
- First Stars and the Origin of Metals - Ian Roederer (U. Michigan)
- Galaxy Fueling and Quenching - Jason Tumlinson (STScI)
- Determination of Galaxy Luminosity Functions at Energies Above the Lyman Edge - Stephan McCandliss (JHU)
- Understanding the Life Cycle of Gas from Protoplanetary Disks to Exoplanets - Kevin France (U. Colorado)
- Discussion