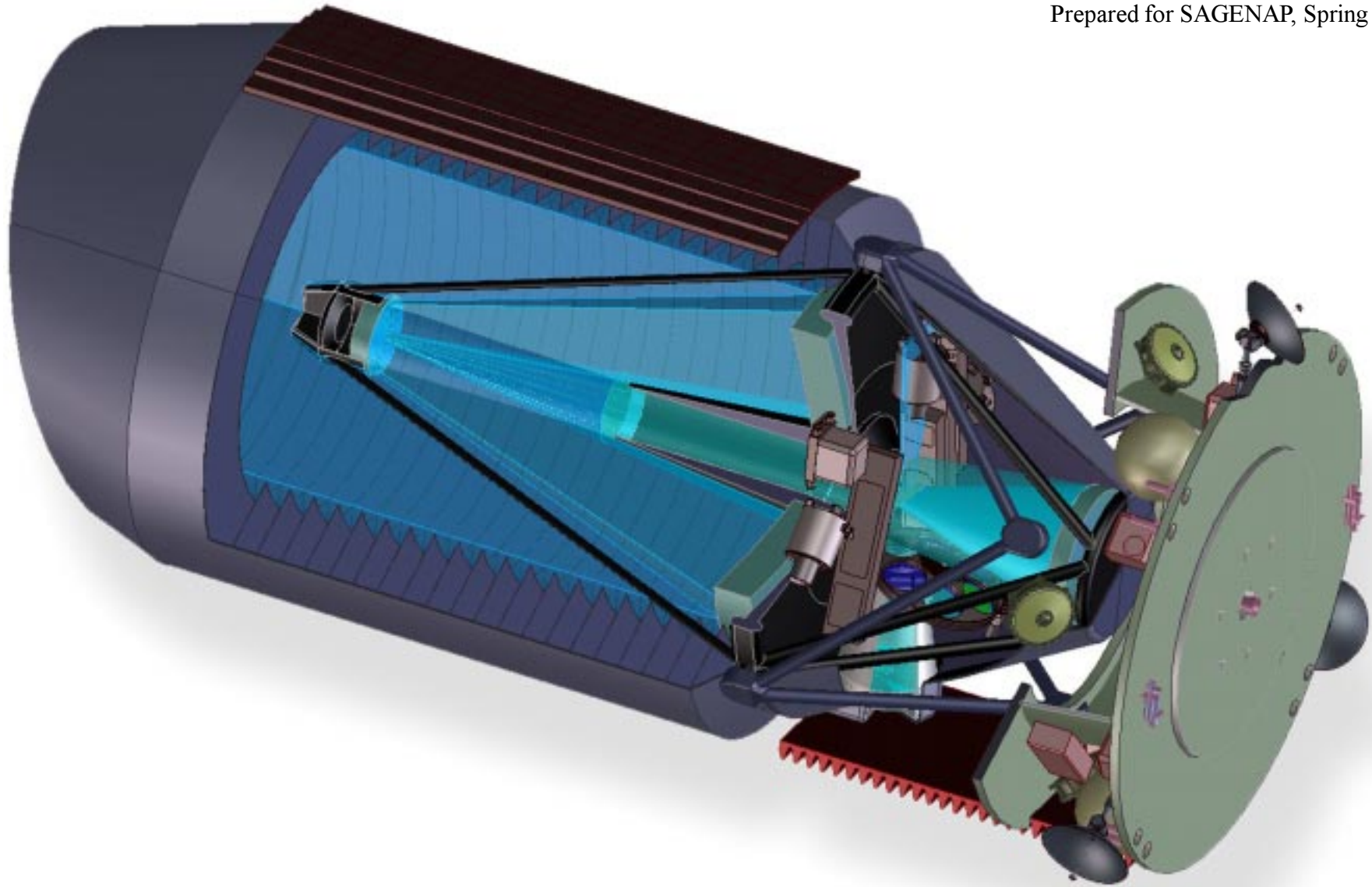




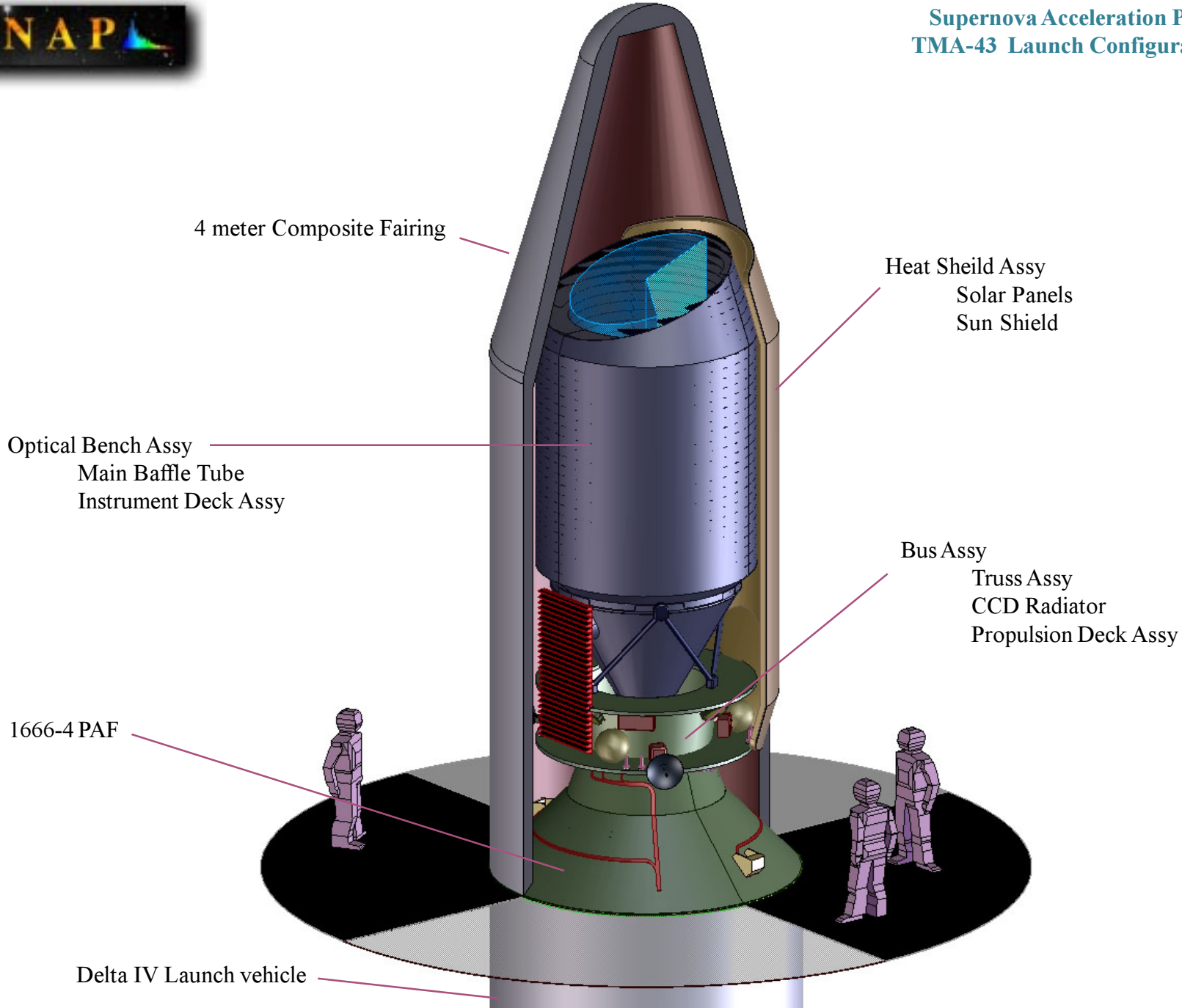
SNAP Conceptual design

TMA-43 , 2 Meter aperture Optical package
Prepared for SAGENAP, Spring 2000



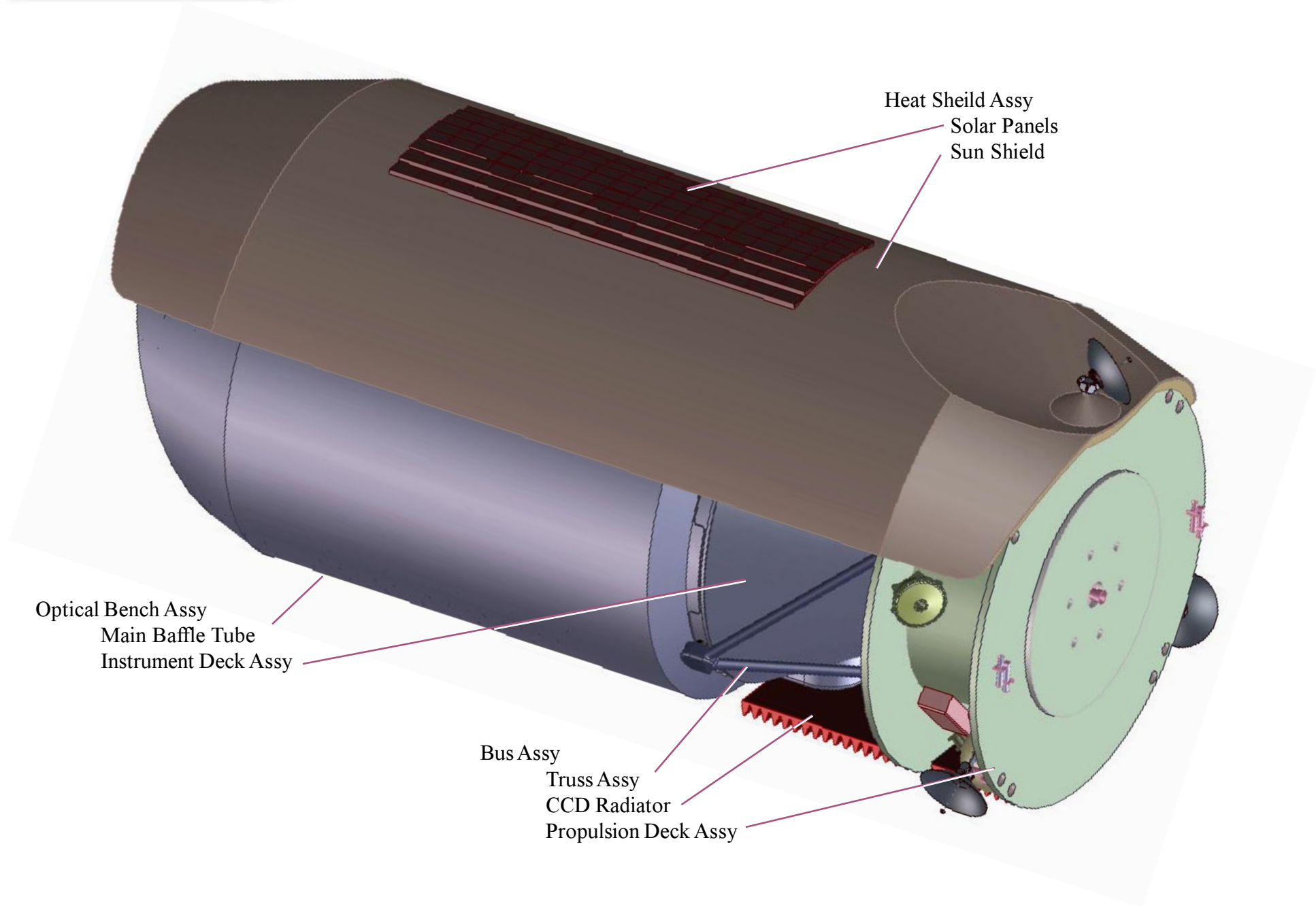


Supernova Acceleration Probe TMA-43 Launch Configuration



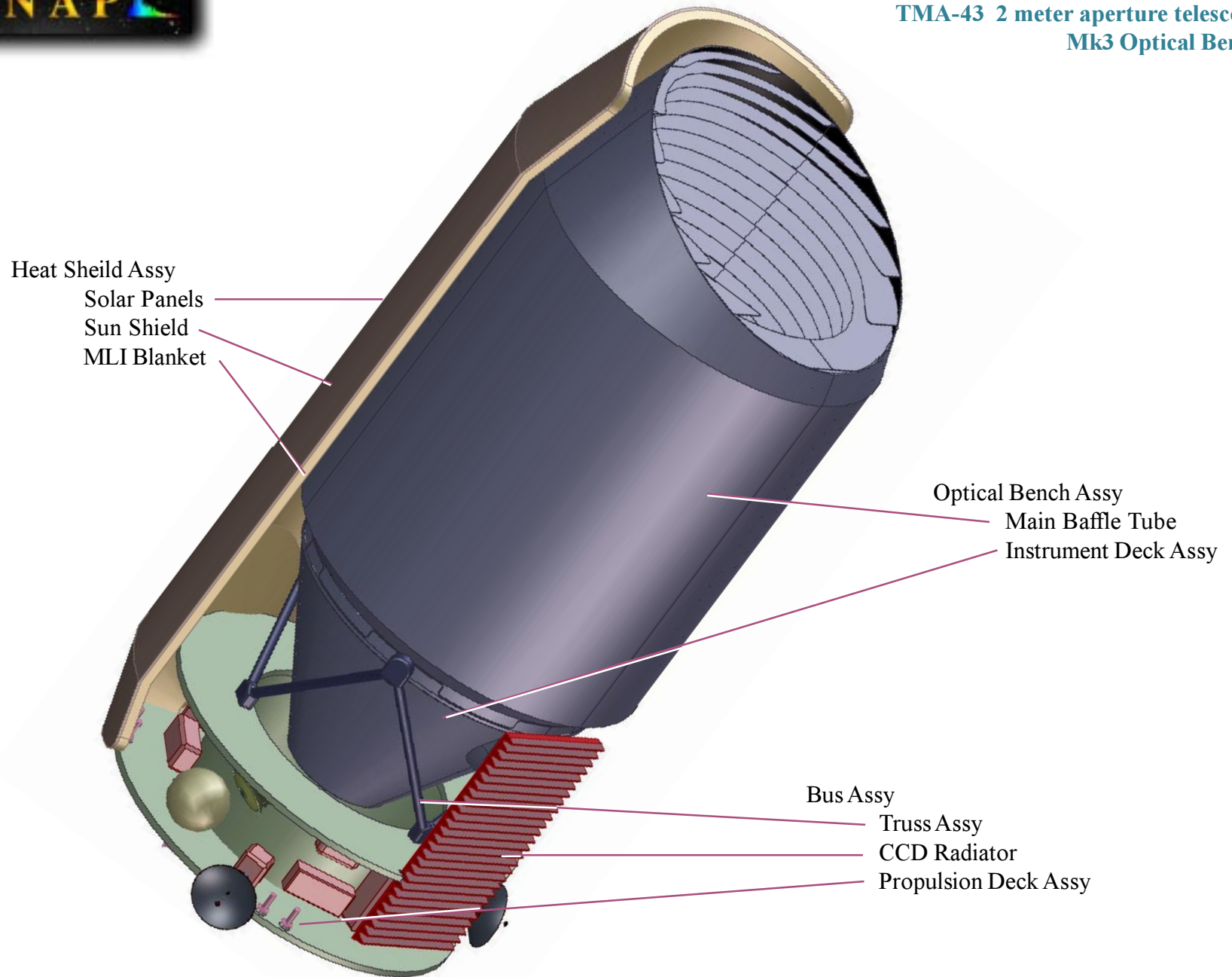


Supernova Acceleration Probe
TMA-43 2 meter aperture telescope
Mk3 Optical Bench



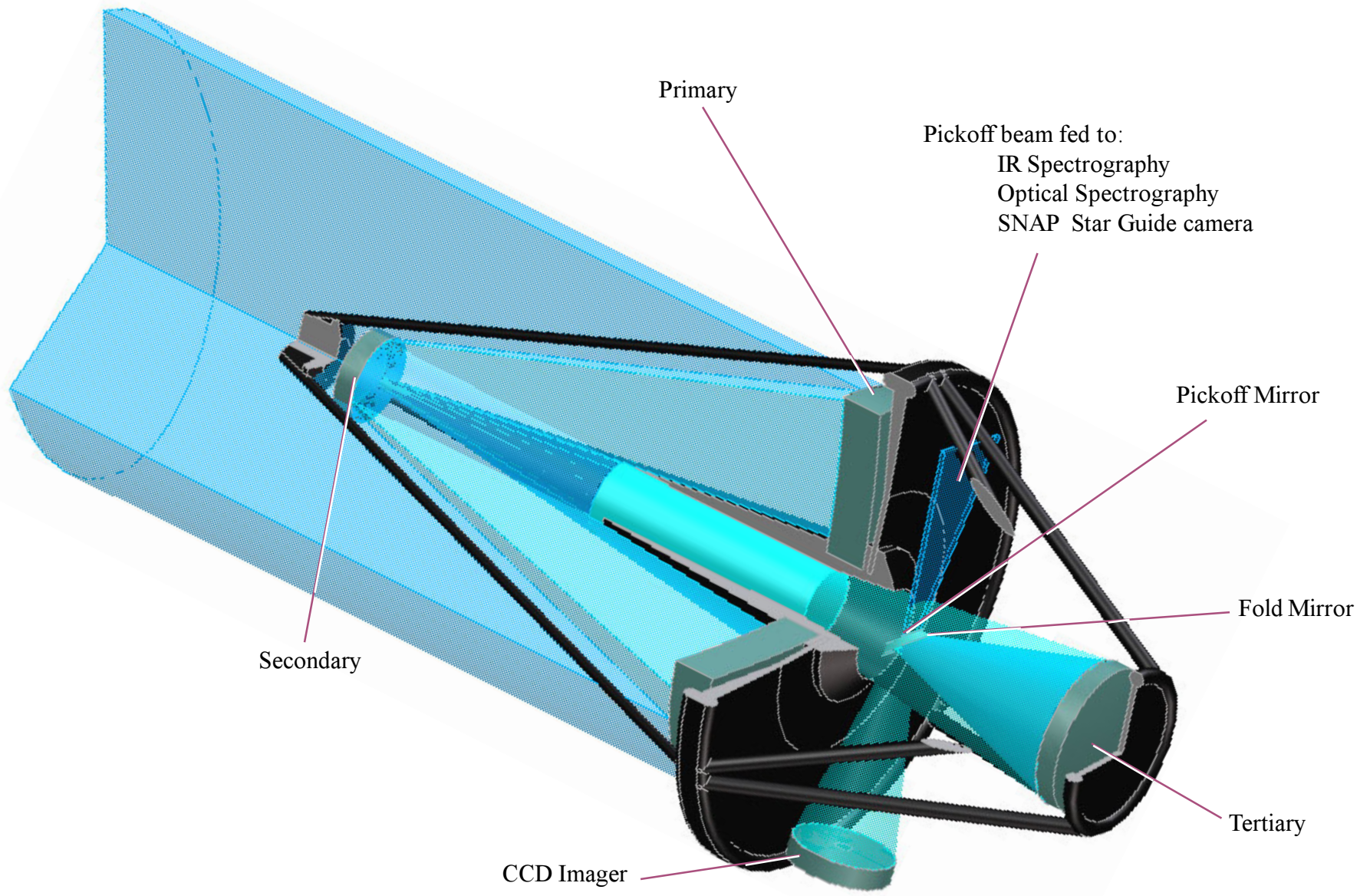


Supernova Acceleration Probe
TMA-43 2 meter aperture telescope
Mk3 Optical Bench





TMA-43 Beam Envelope
Mk3 Optical Bench
(Main Baffles and shrouds not shown)



Primary

Pickoff beam fed to:
IR Spectrography
Optical Spectrography
SNAP Star Guide camera

Pickoff Mirror

Fold Mirror

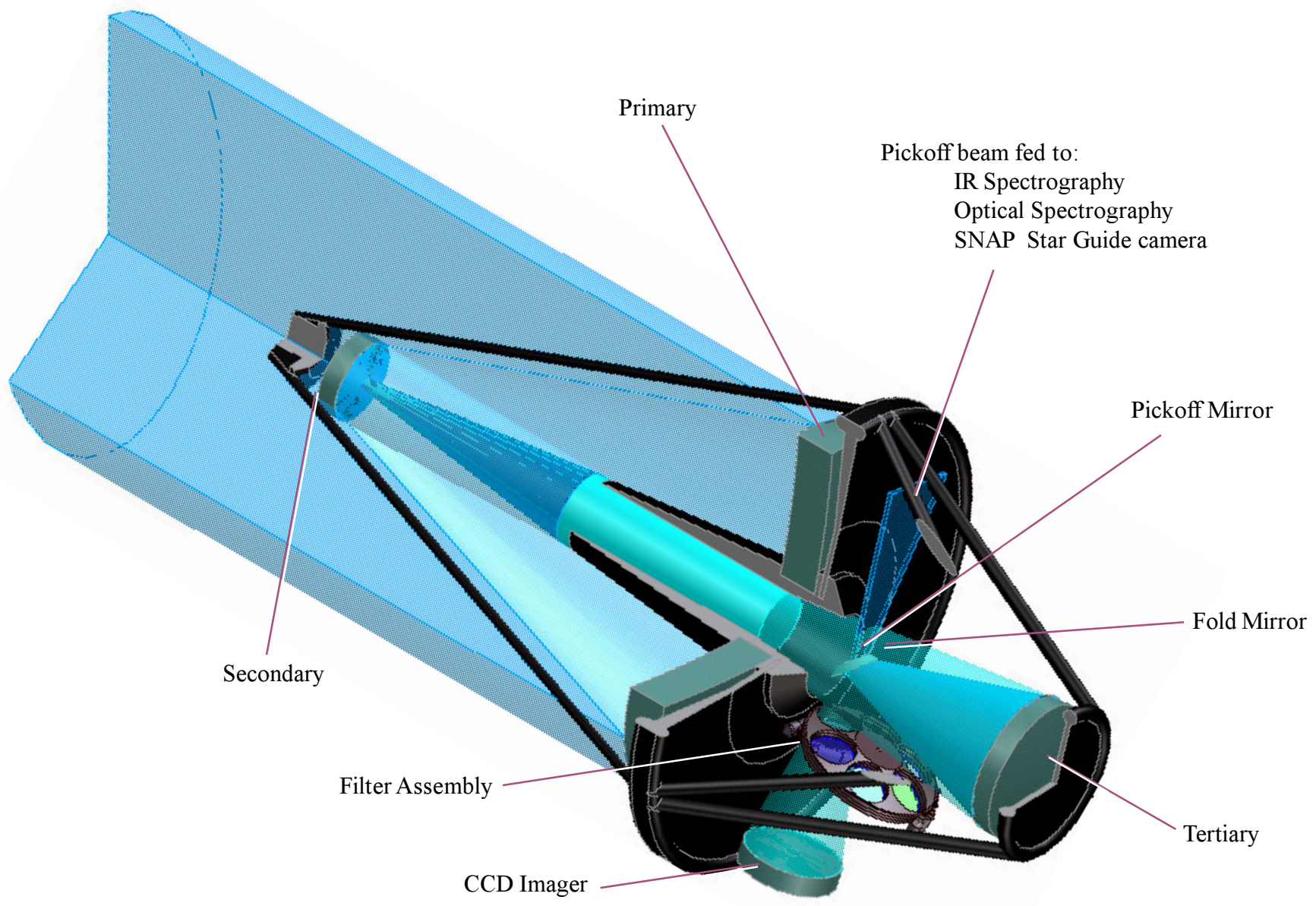
Tertiary

CCD Imager

Secondary



**TMA-43 Beam Envelope
Mk3 Optical Bench
(Main Baffles and shrouds not shown)**



Primary

Pickoff beam fed to:
IR Spectrography
Optical Spectrography
SNAP Star Guide camera

Pickoff Mirror

Fold Mirror

Secondary

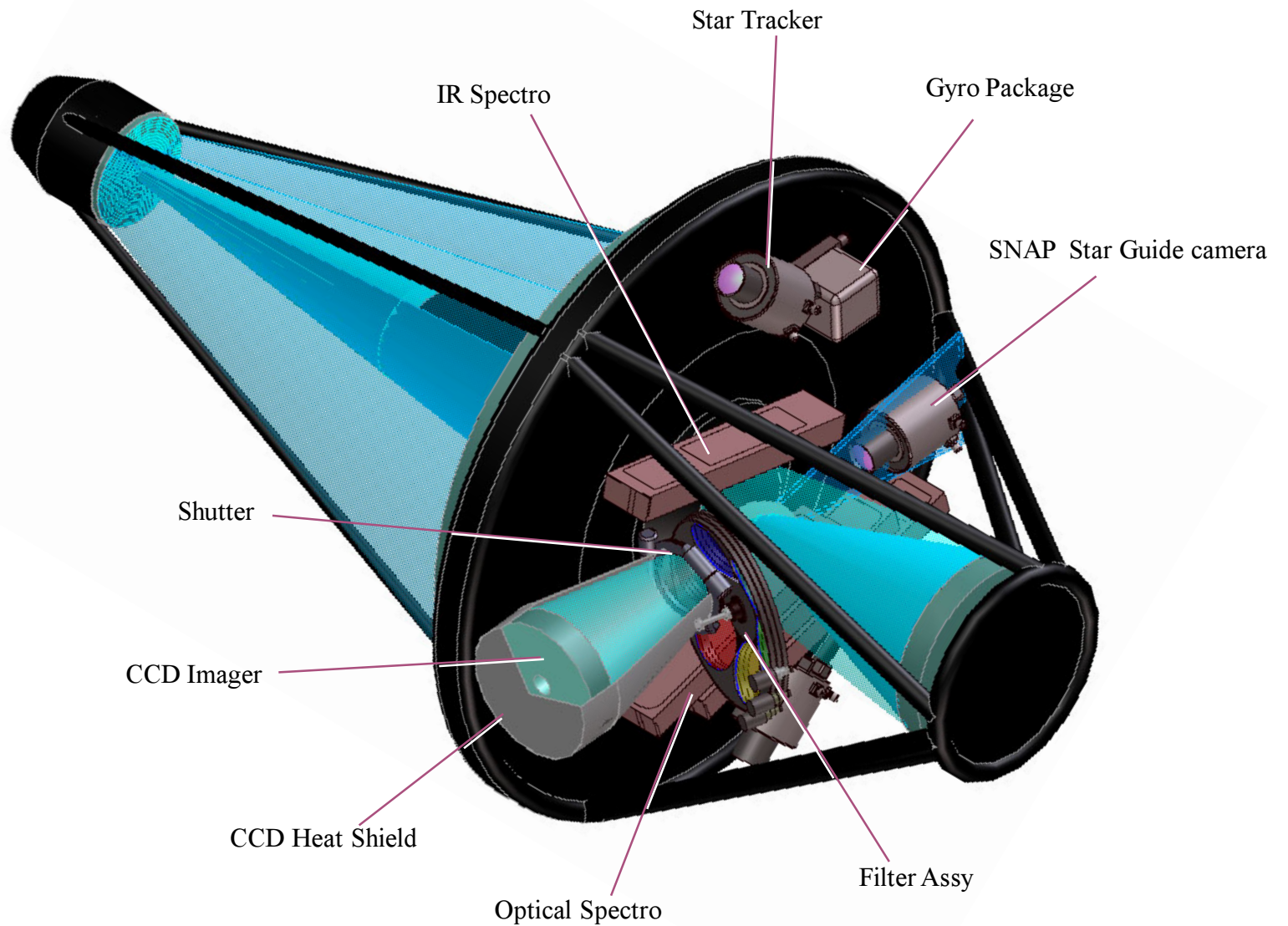
Filter Assembly

CCD Imager

Tertiary



**Instrument Deck
TMA-43 Beam Envelope
Mk3 Optical Bench
(Main Baffles and shrouds not shown)**

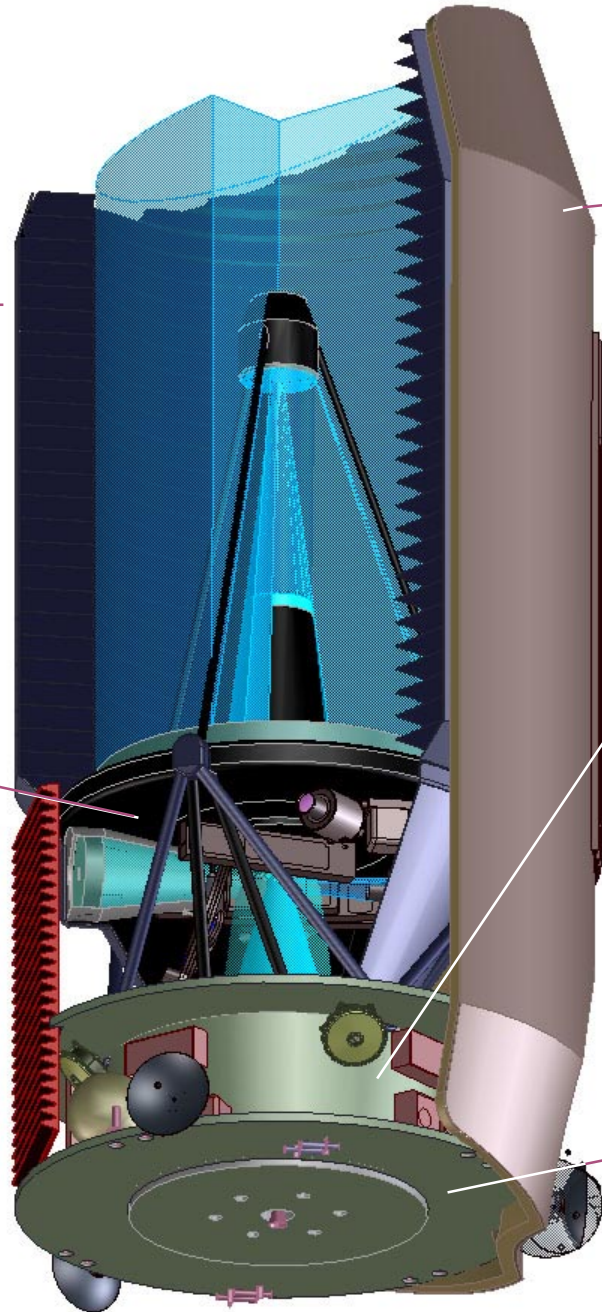




Supernova Acceleration Probe TMA-43 Beam Envelope Mk3 Optical Bench

- Optical Bench Assy
 - Main Baffle Tube
 - Secondary Baffle
 - Inner Baffle
 - Space Frame

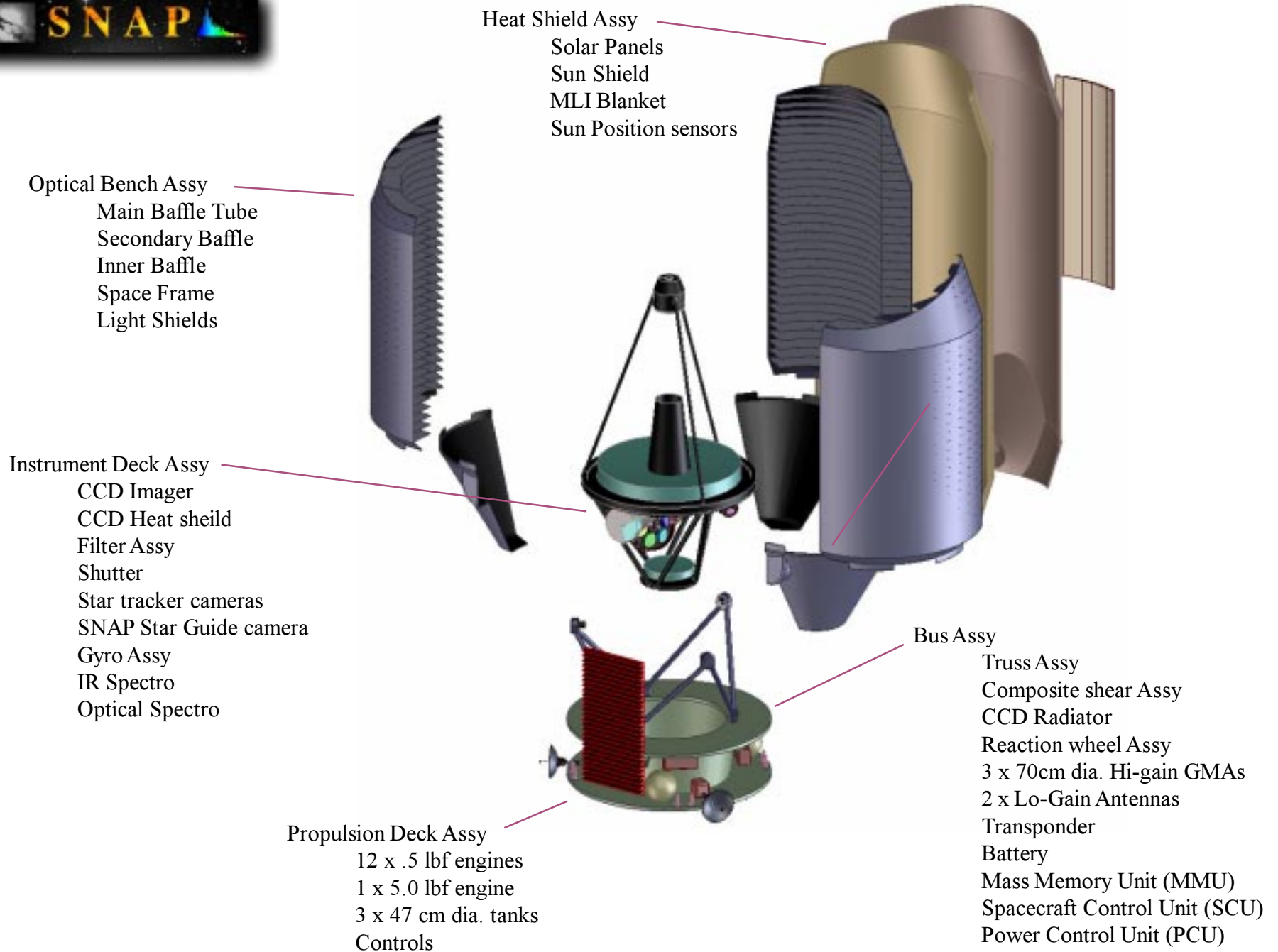
- Instrument Deck Assy
 - CCD Imager
 - CCD Heat shield
 - Filter Assy
 - Shutter
 - Star tracker cameras
 - SNAP Star Guide camera
 - Gyro Assy
 - IR Spectro
 - Optical Spectro



- Heat Shield Assy
 - Solar Panels
 - Sun Shield
 - MLI Blanket
 - Sun Position sensors

- Bus Assy
 - Truss Assy
 - Composite shear Assy
 - CCD Radiator
 - Reaction wheel Assy
 - 3 x 70cm dia. Hi-gain GMAs
 - 2 x Lo-Gain Antennas
 - Transponder
 - Battery
 - Mass Memory Unit (MMU)
 - Spacecraft Control Unit (SCU)
 - Power Control Unit (PCU)

- Propulsion Deck Assy
 - 12 x .5 lbf engines
 - 1 x 5.0 lbf engine
 - 3 x 47 cm dia. tanks
 - Controls





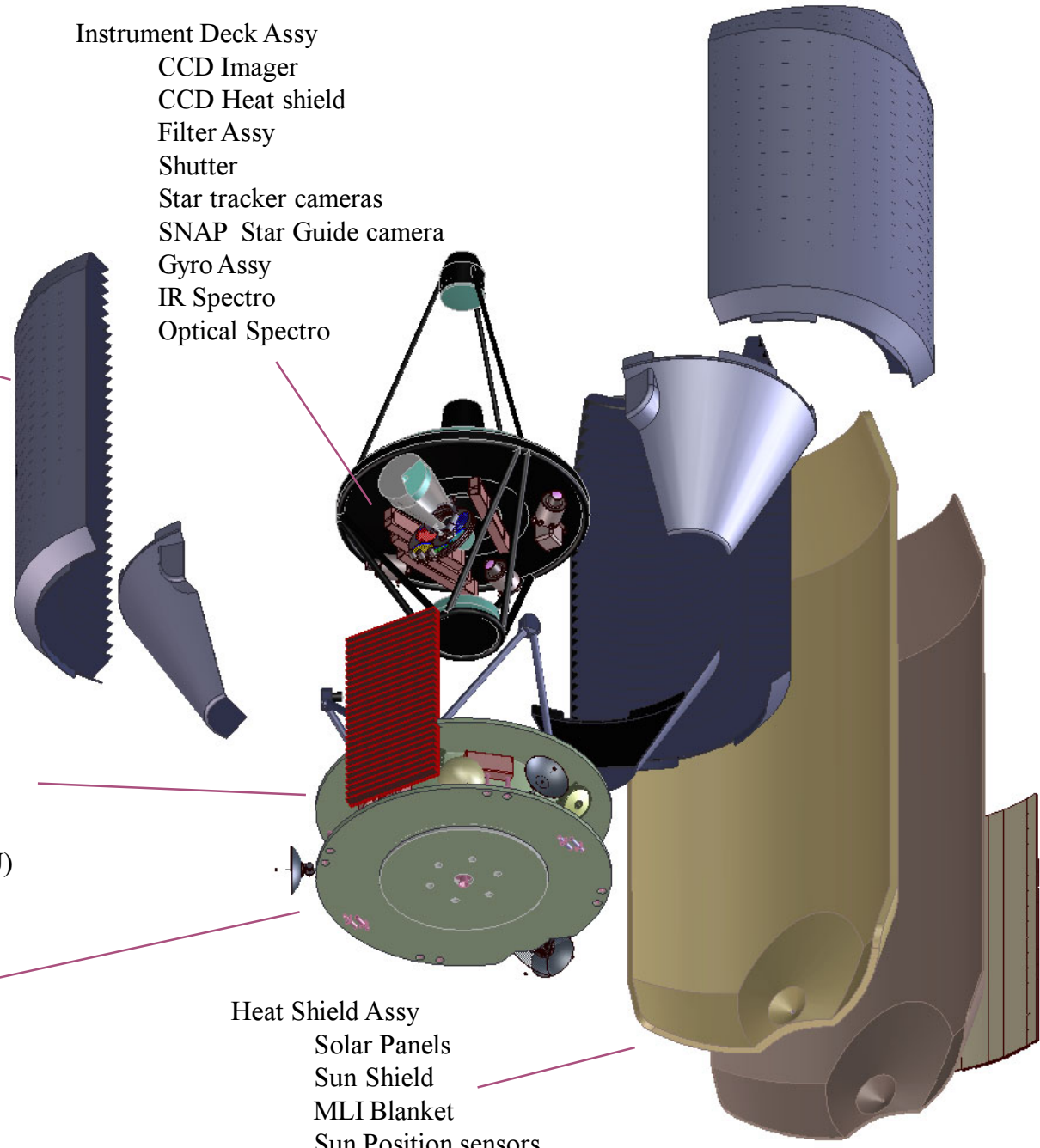
Optical Bench Assy
Main Baffle Tube
Secondary Baffle
Inner Baffle
Space Frame
Light Shields

Bus Assy
Truss Assy
Composite shear Assy
CCD Radiator
Reaction wheel Assy
3 x 70cm dia. Hi-gain GMAs
2 x Lo-Gain Antennas
Transponder
Battery
Mass Memory Unit (MMU)
Spacecraft Control Unit (SCU)
Power Control Unit (PCU)

Propulsion Deck Assy
12 x .5 lbf engines
1 x 5.0 lbf engine
3 x 47 cm dia. tanks
Controls

Instrument Deck Assy
CCD Imager
CCD Heat shield
Filter Assy
Shutter
Star tracker cameras
SNAP Star Guide camera
Gyro Assy
IR Spectro
Optical Spectro

Heat Shield Assy
Solar Panels
Sun Shield
MLI Blanket
Sun Position sensors

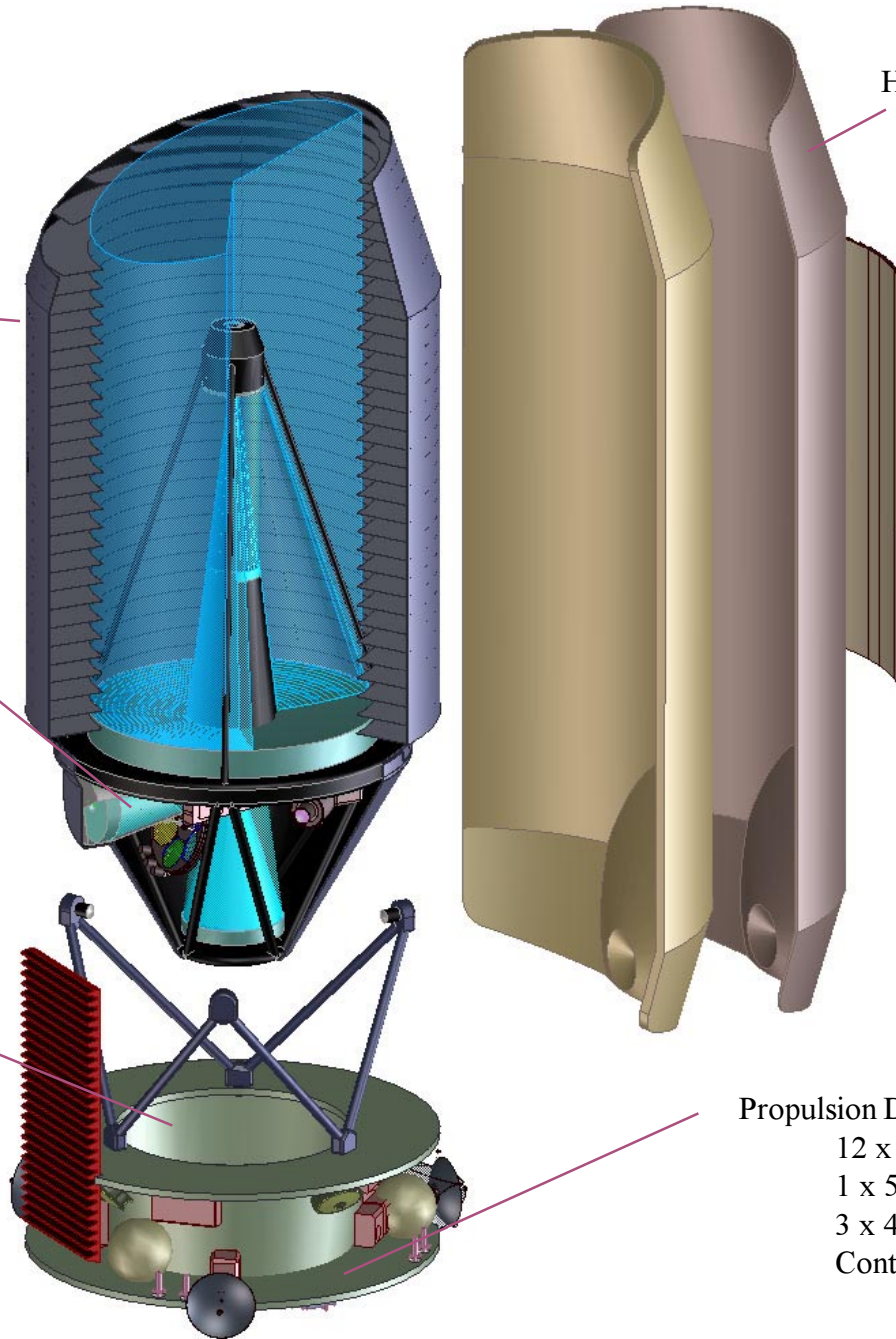




- Optical Bench Assy
 - Main Baffle Tube
 - Secondary Baffle
 - Inner Baffle
 - Space Frame
 - Light Shields

- Instrument Deck Assy
 - CCD Imager
 - CCD Heat shield
 - Filter Assy
 - Shutter
 - Star tracker cameras
 - SNAP Star Guide camera
 - Gyro Assy
 - IR Spectro
 - Optical Spectro

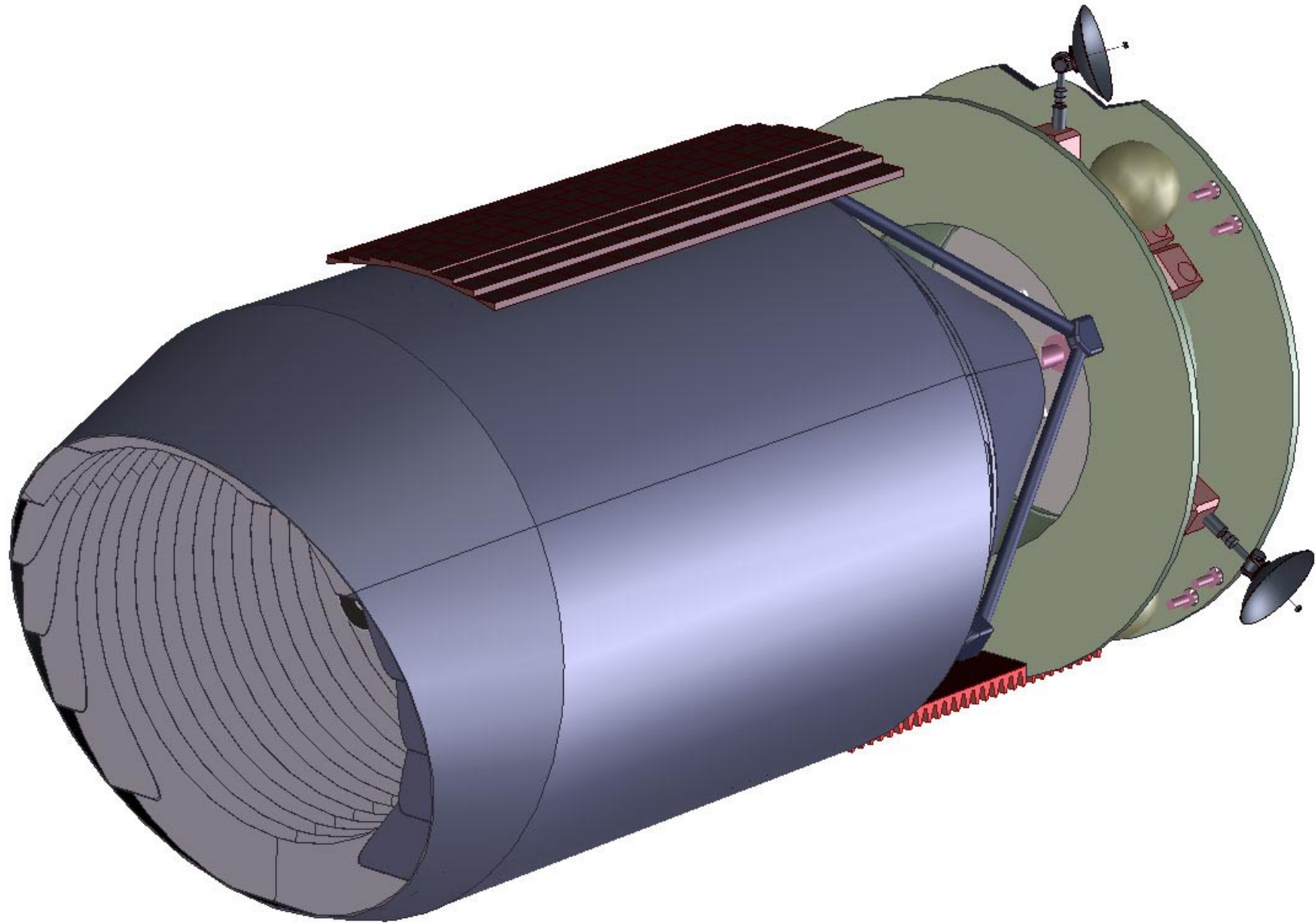
- Bus Assy
 - Truss Assy
 - Composite shear Assy
 - CCD Radiator
 - Reaction wheel Assy
 - 3 x 70cm dia. Hi-gain GMAs
 - 2 x Lo-Gain Antennas
 - Transponder
 - Battery
 - Mass Memory Unit (MMU)
 - Spacecraft Control Unit (SCU)
 - Power Control Unit (PCU)



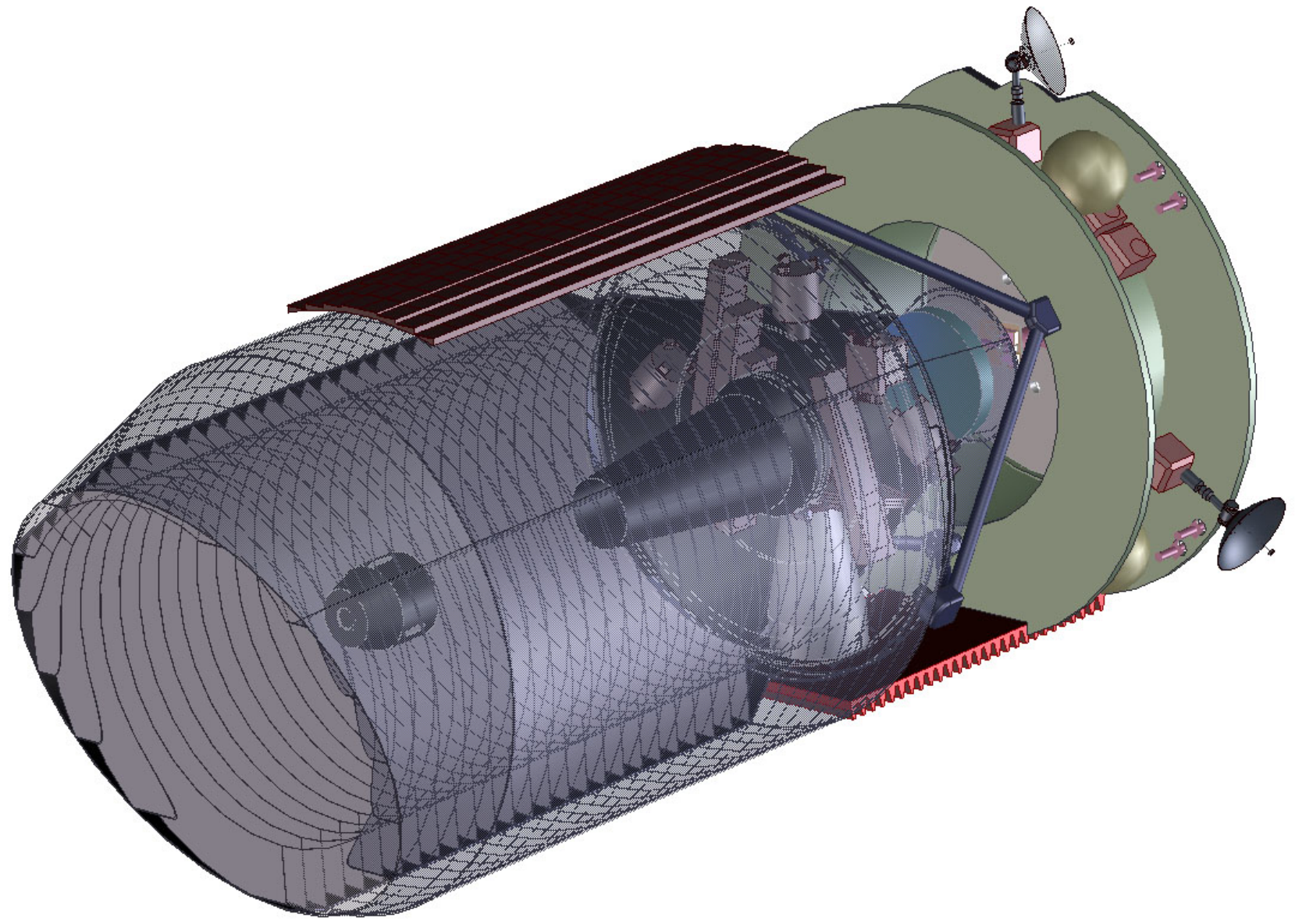
- Heat Shield Assy
 - Solar Panels
 - Sun Shield
 - MLI Blanket
 - Sun Position sensors

- Propulsion Deck Assy
 - 12 x .5 lbf engines
 - 1 x 5.0 lbf engine
 - 3 x 47 cm dia. tanks
 - Controls

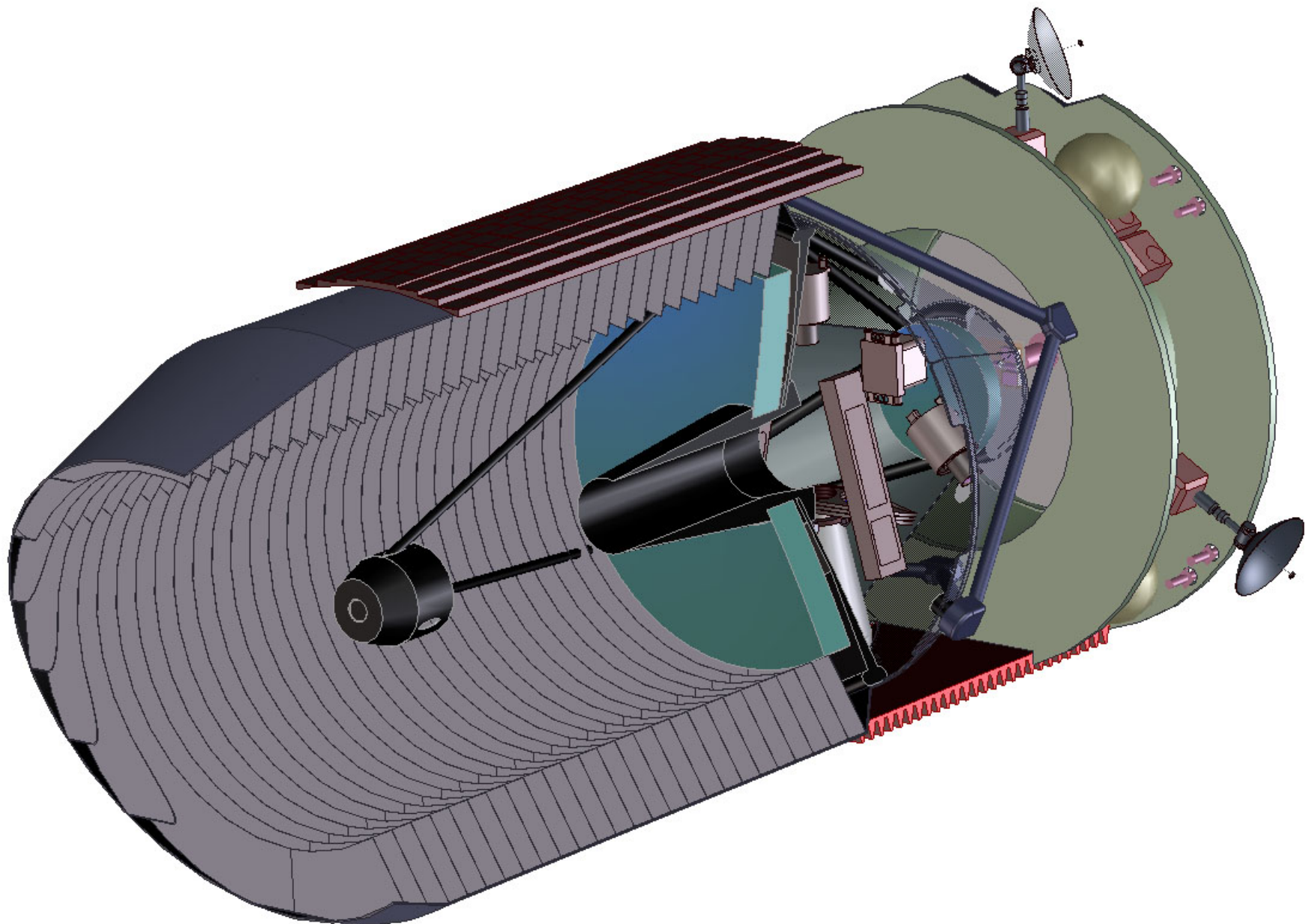
SNAP



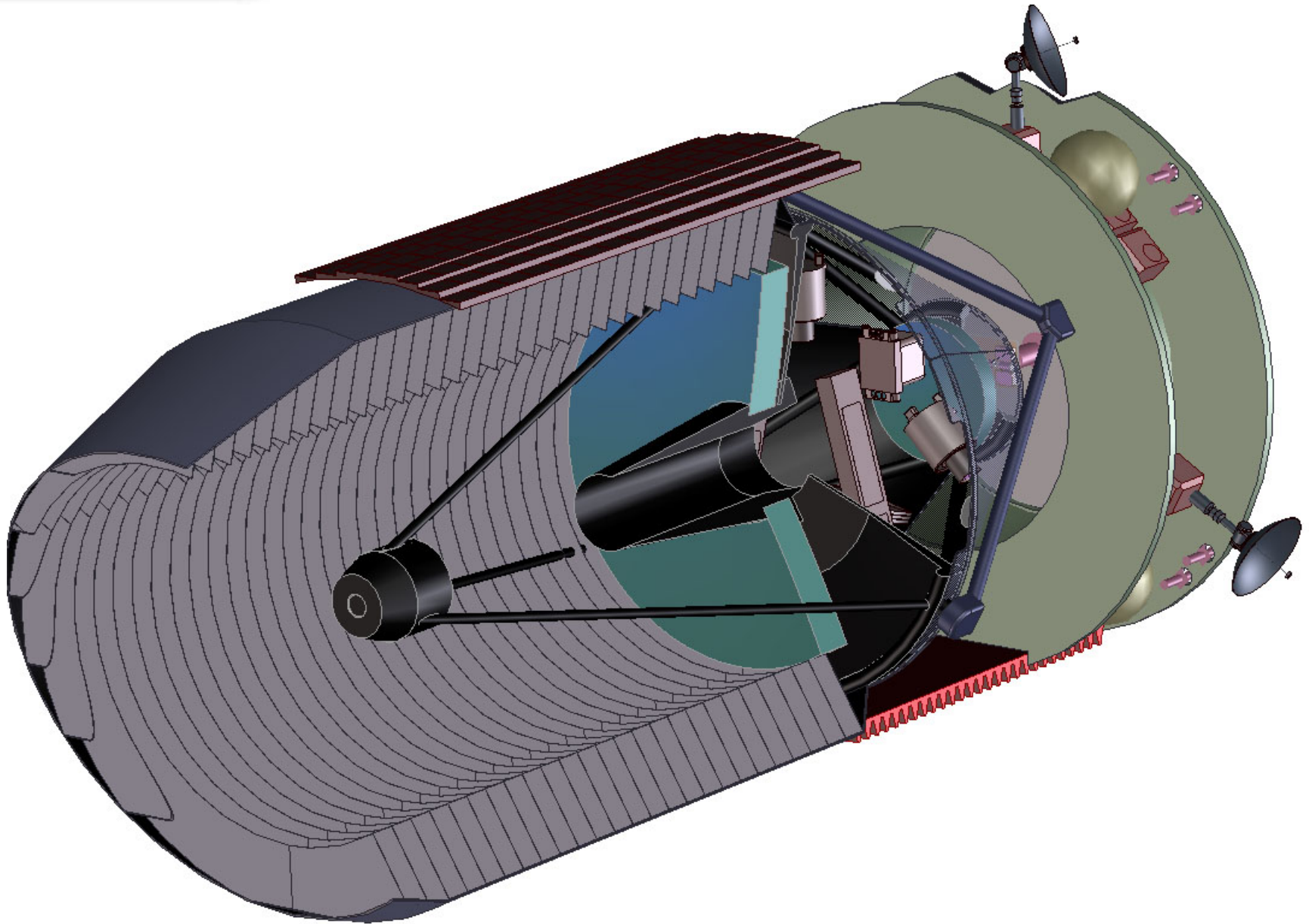
SNAP



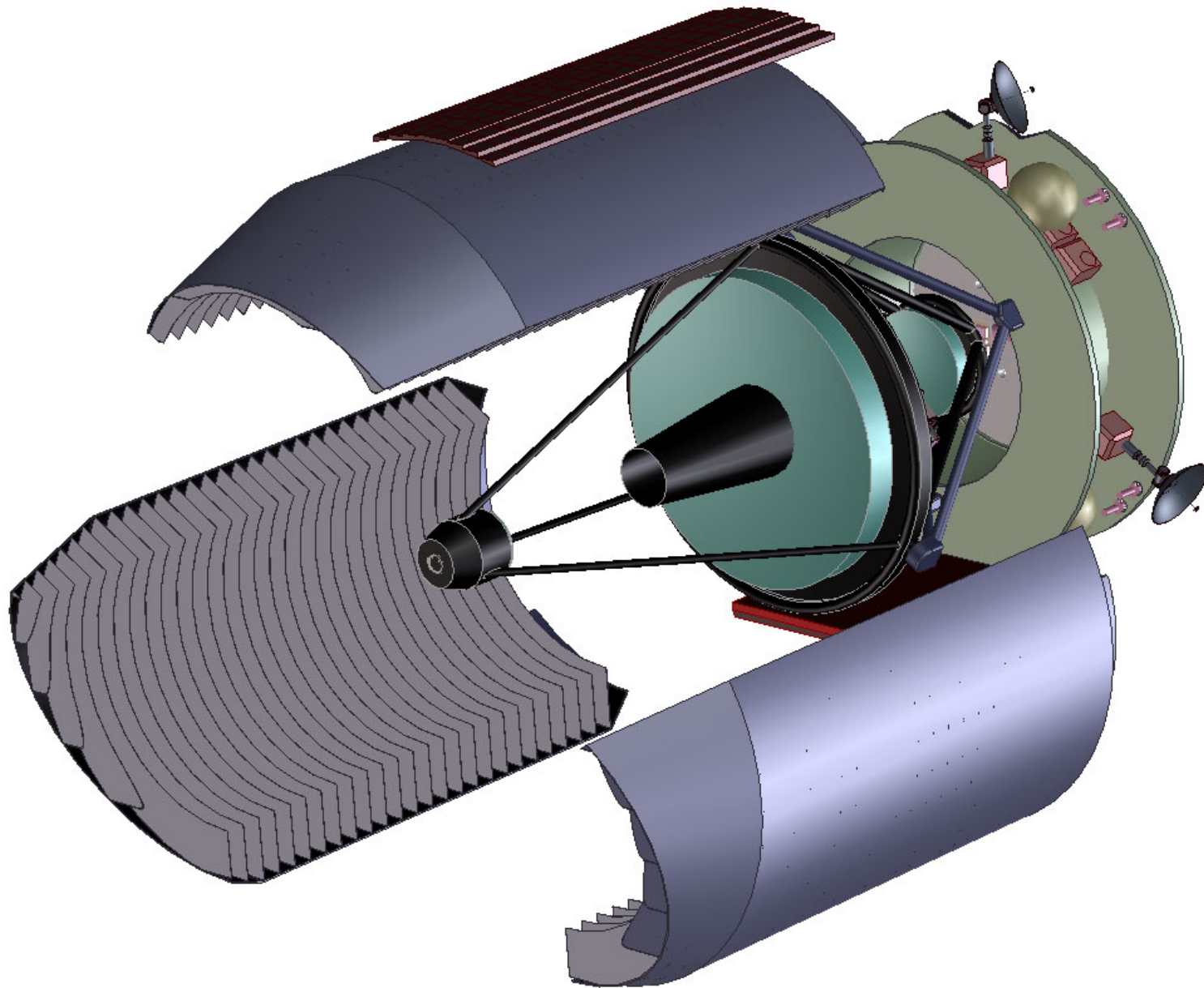
SNAP



SNAP



SNAP



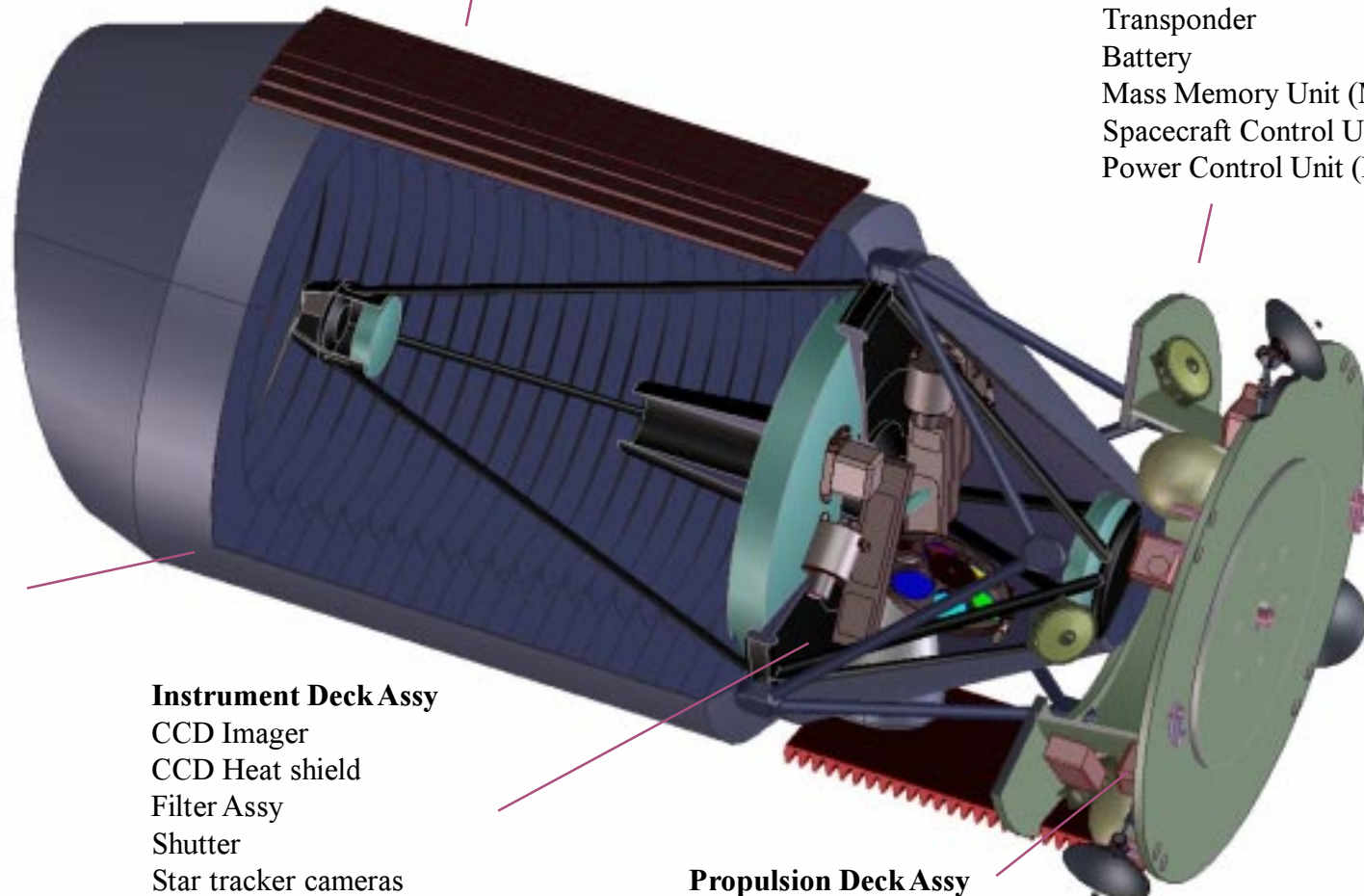


Heat Shield Assy

- Solar Panels
- Sun Shield (not shown)
- MLI Blanket (not shown)
- Sun Position sensors (not shown)

Bus Assy

- Truss Assy
- Composite shear Assy
- CCD Radiator
- Reaction wheel Assy
- 3 x 70cm dia. Hi-gain GMAs
- 2 x Lo-Gain Antennas
- Transponder
- Battery
- Mass Memory Unit (MMU)
- Spacecraft Control Unit (SCU)
- Power Control Unit (PCU)



Optical Bench Assy

- Main Baffle Tube
- Secondary Baffle
- Inner Baffle
- Space Frame
- Light Shields

Instrument Deck Assy

- CCD Imager
- CCD Heat shield
- Filter Assy
- Shutter
- Star tracker cameras
- SNAP Star Guide camera
- Gyro Assy
- IR Spectro
- Optical Spectro

Propulsion Deck Assy

- 12 x .5 lbf engines
- 1 x 5.0 lbf engine
- 3 x 47 cm dia. tanks
- Controls

