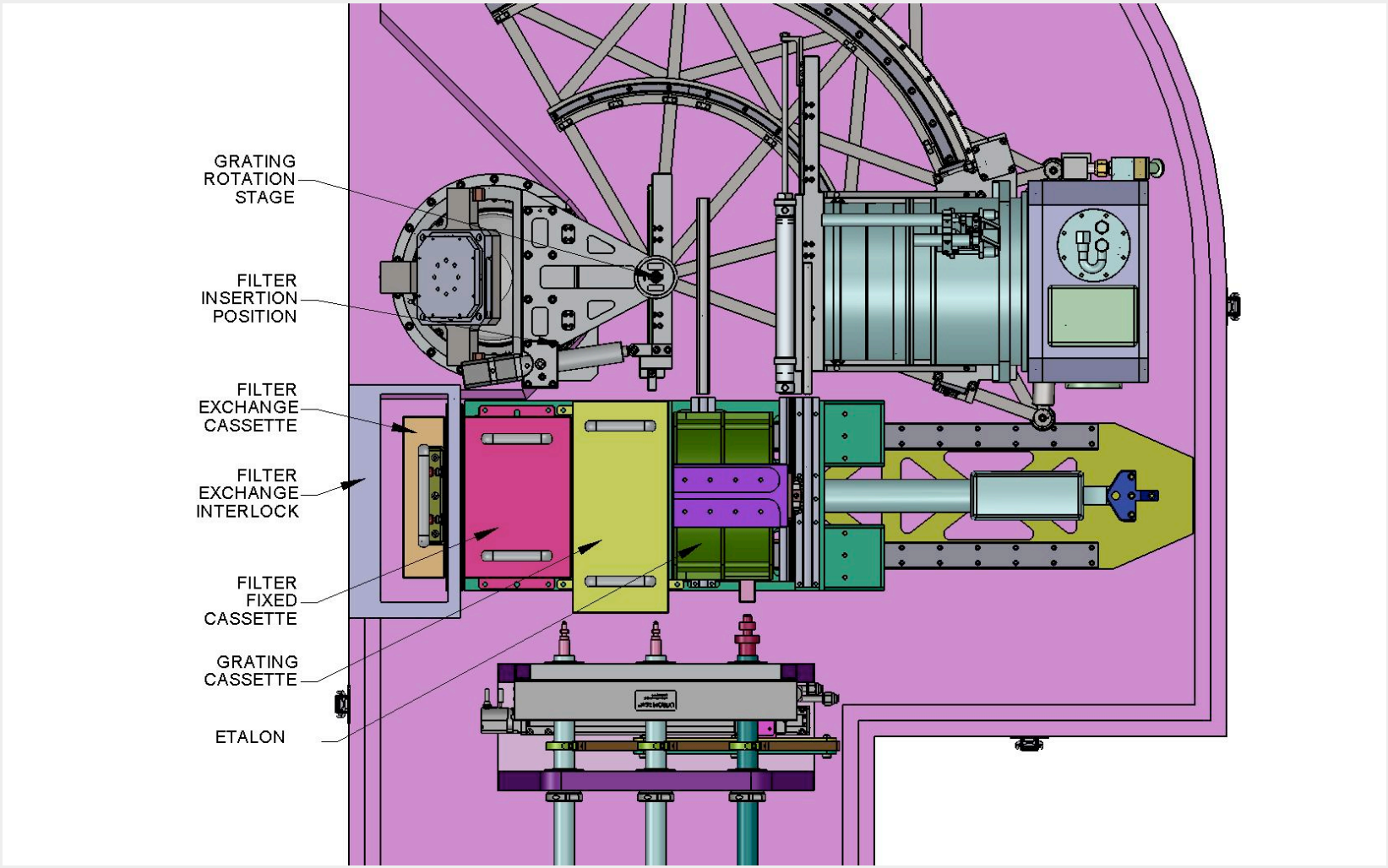
SALT RSS-NIR
MID-TERM REVIEW
MAY 20 & 21, 2009

OPTICAL STORAGE ASSEMBLY

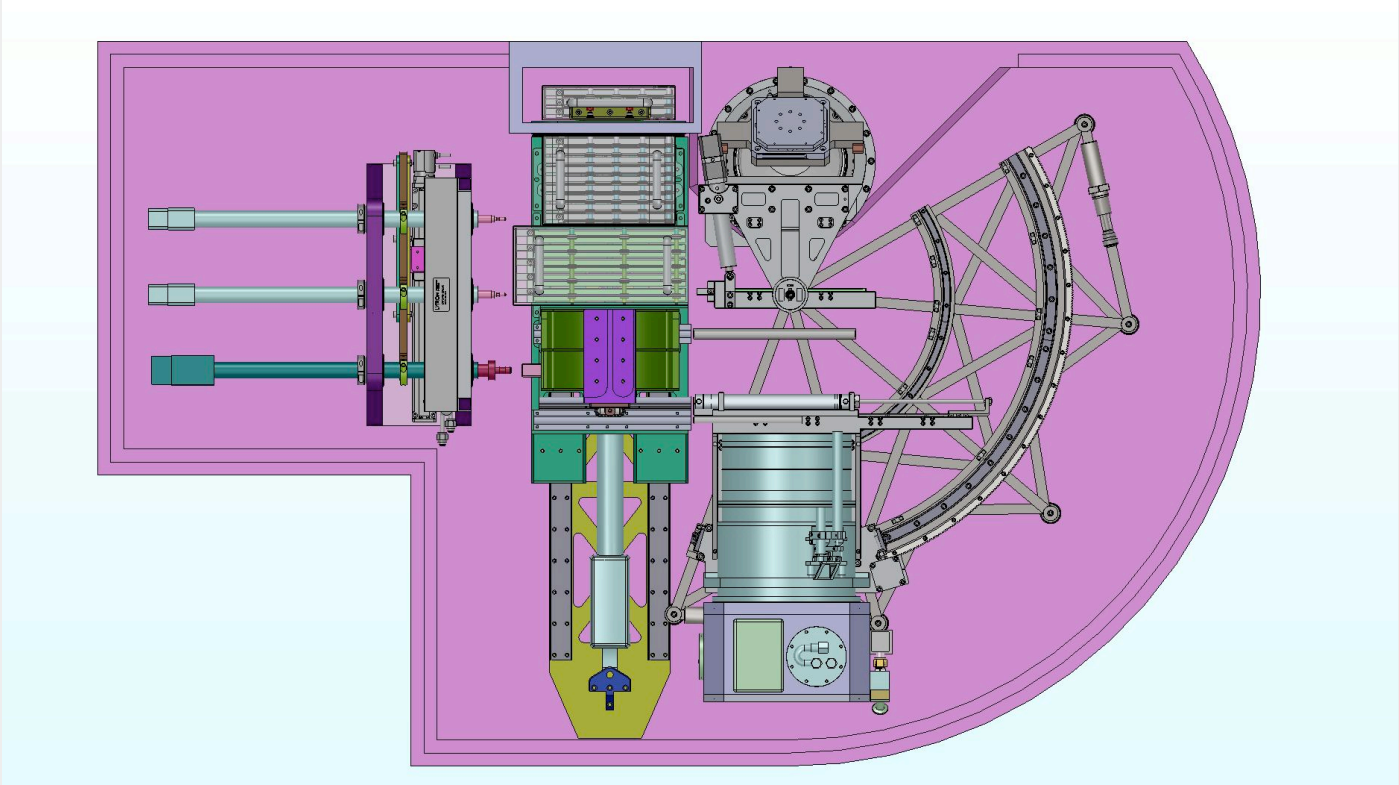
JEFF WONG
UNIVERSITY OF WISCONSIN – PARADIGM DESIGN INC.

OPTICAL STORAGE ASSEMBLY TOP VIEW



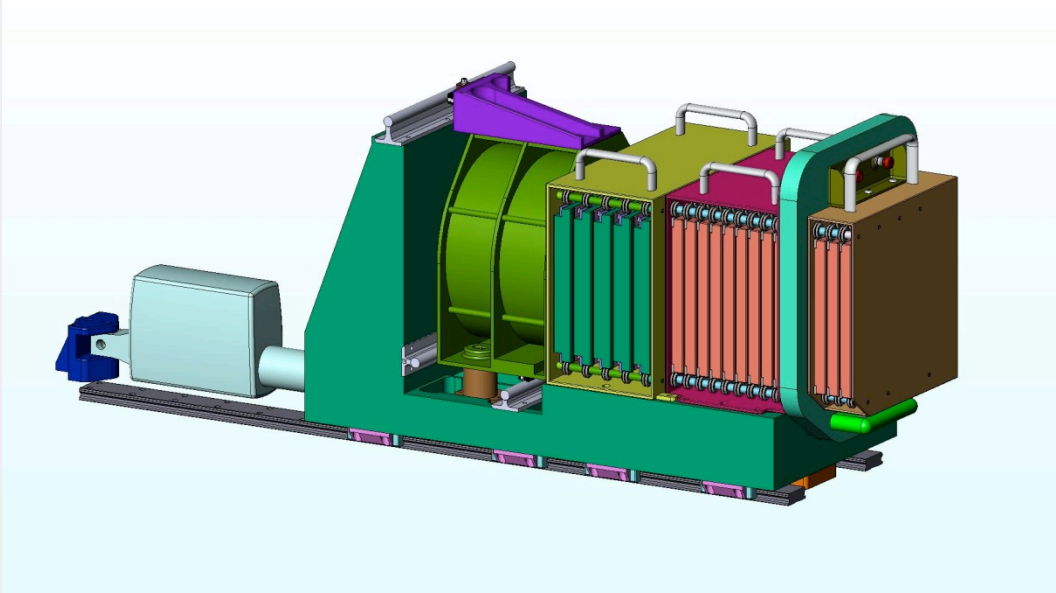
OSA TOP VIEW

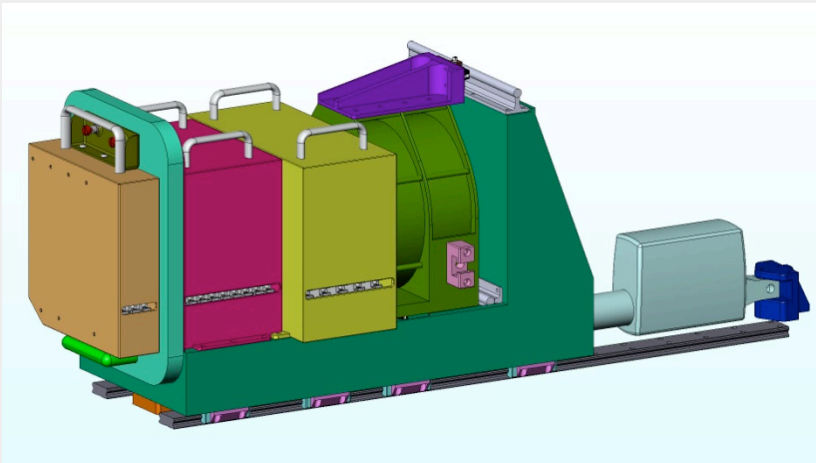
- OSA is independently supported from the NIR optical frame to the truss structure with flexure mounts to minimize coupling of the 2 systems.



OPTICS STORAGE ASSEMBLY

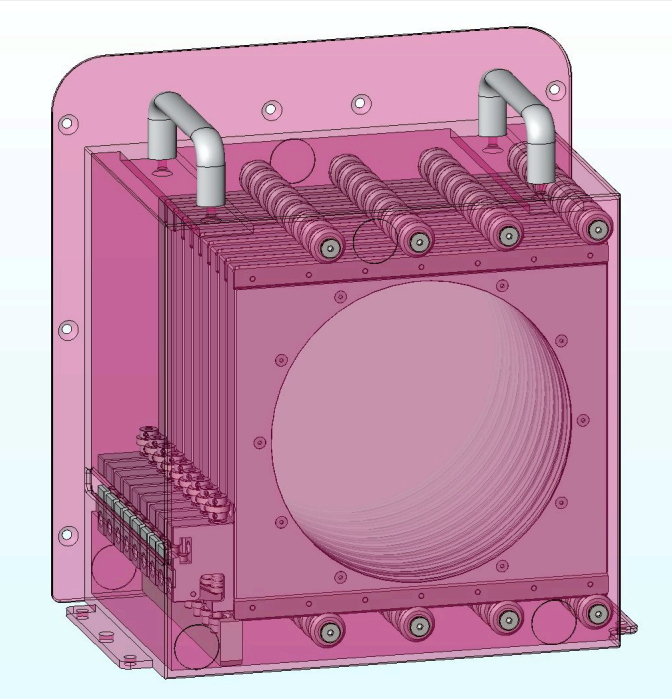
- Filter exchange cassette
  - 3 Filters
- Filter fixed cassette
  - 9 Filters
- Grating fixed cassette
  - 5 Gratings
- Fabry-Perot extalon
  - 1 Etalon

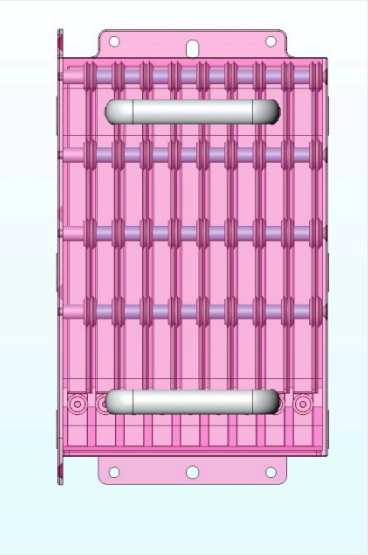


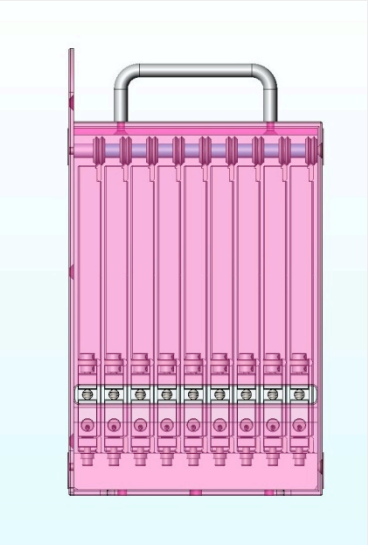


FILTER CASSETTE ASSEMBLY

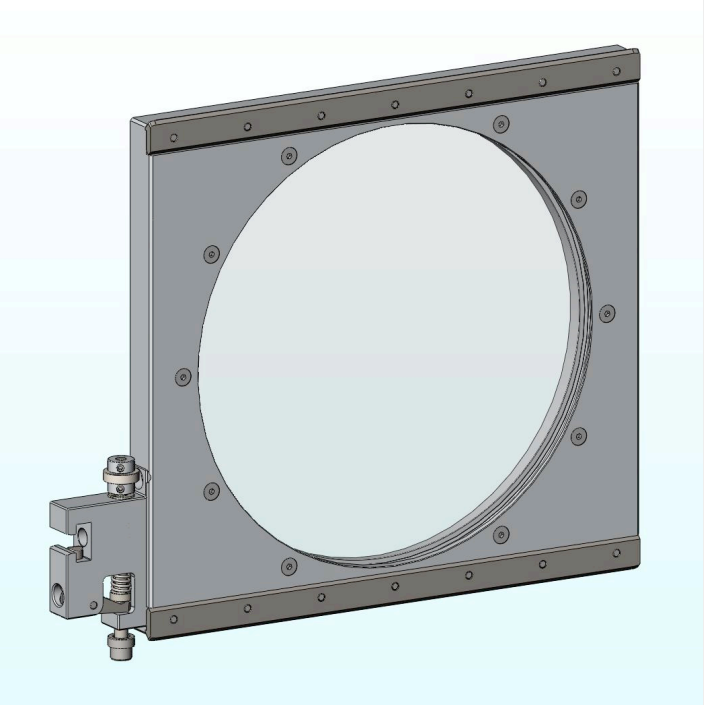
- Filter & Grating frames use a wheel-rail kinematic mounting system similar to the current slit mask insertion mechanism

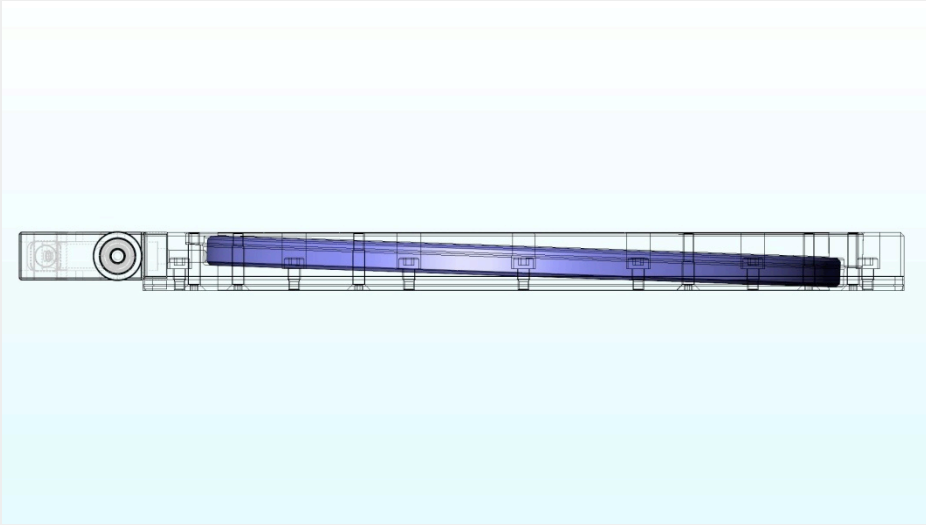


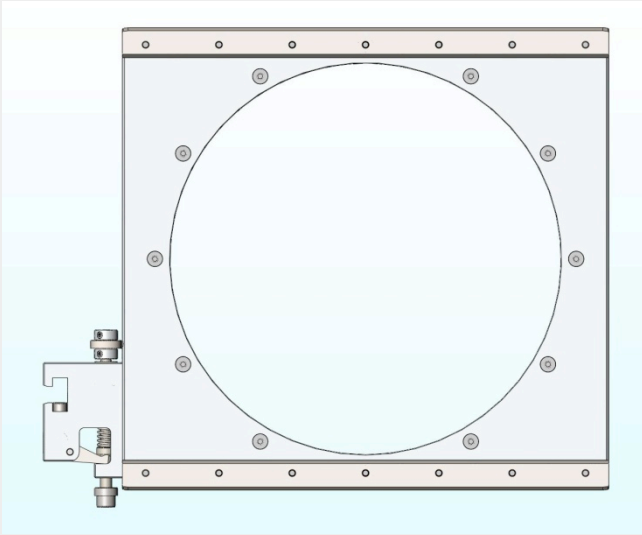




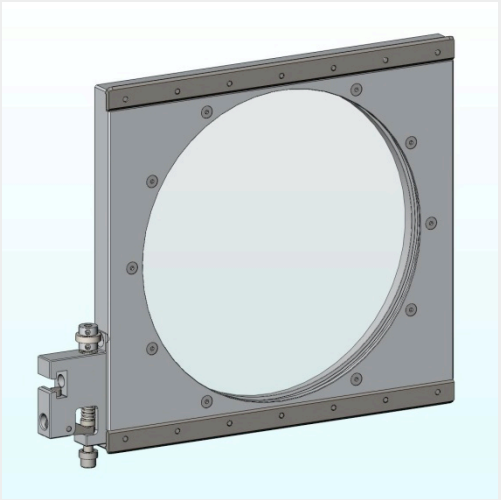
FILTER ASSEMBLY

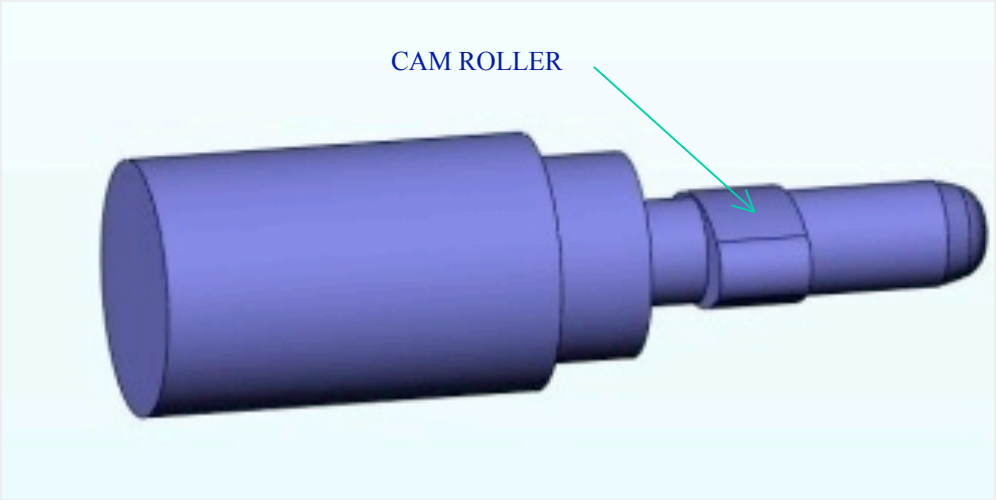


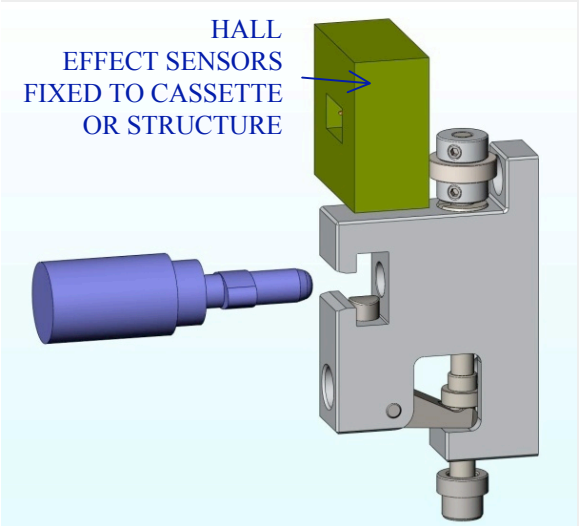


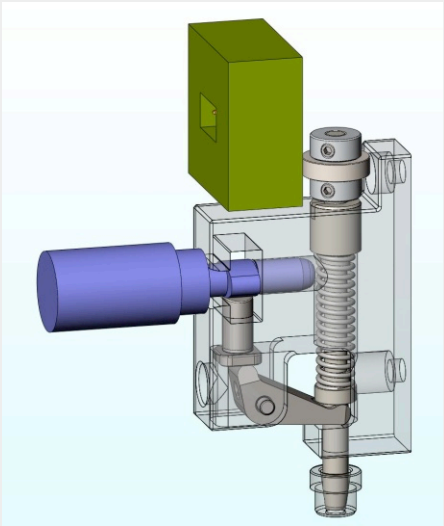


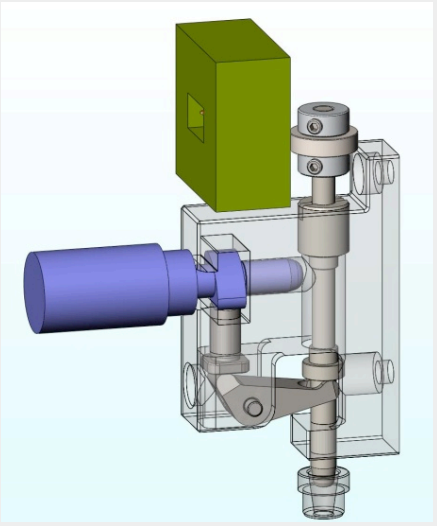
FILTER/GRATING LOCK MECHANISM

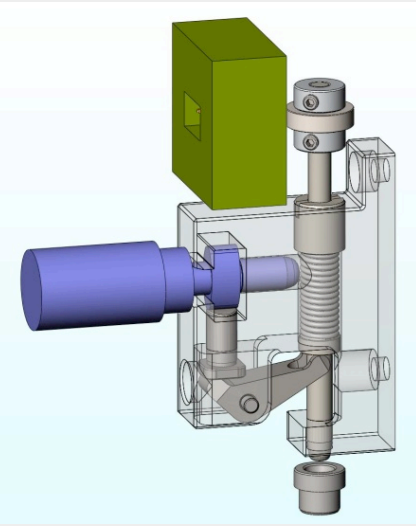




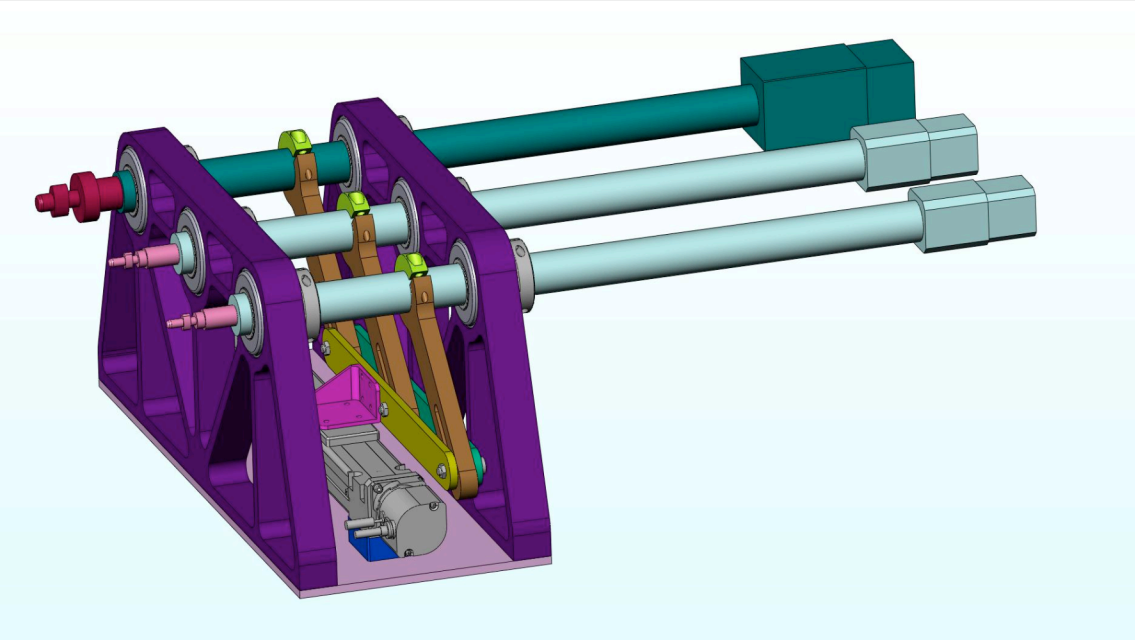




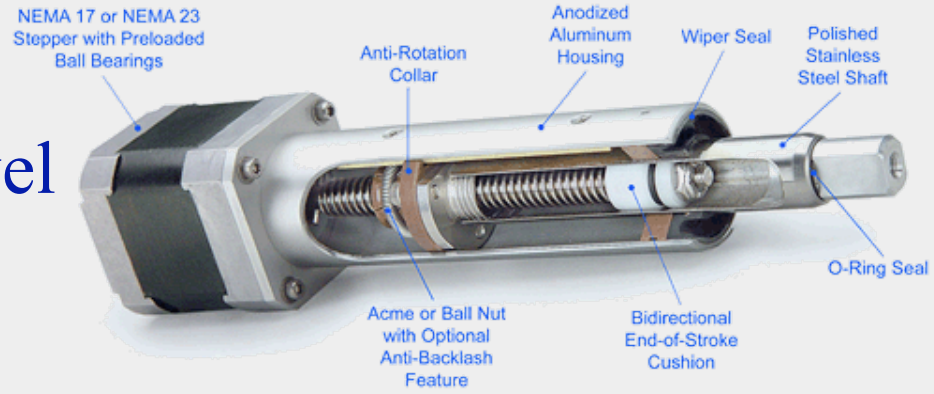




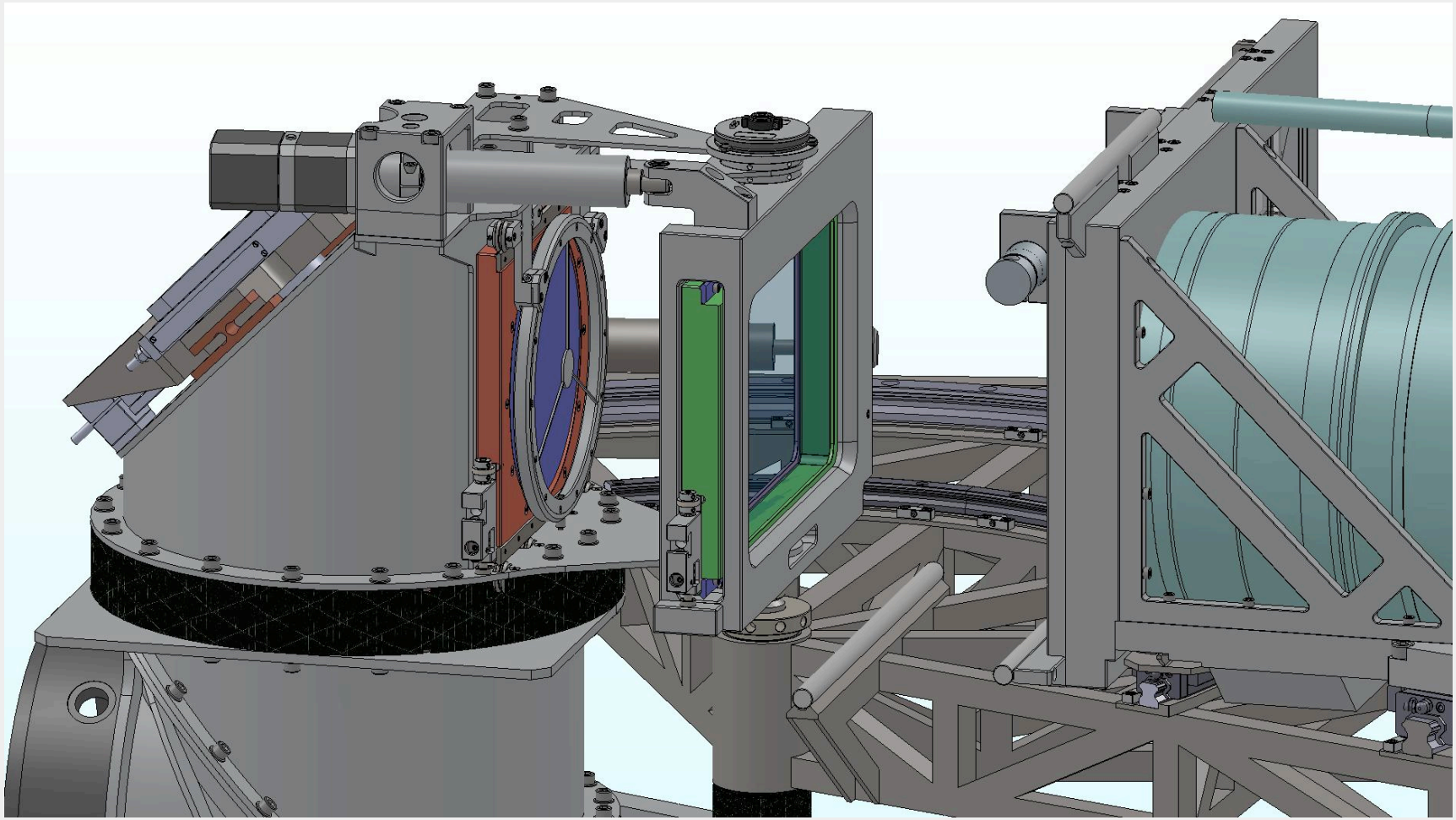
OSA INSERTION MECHANISM



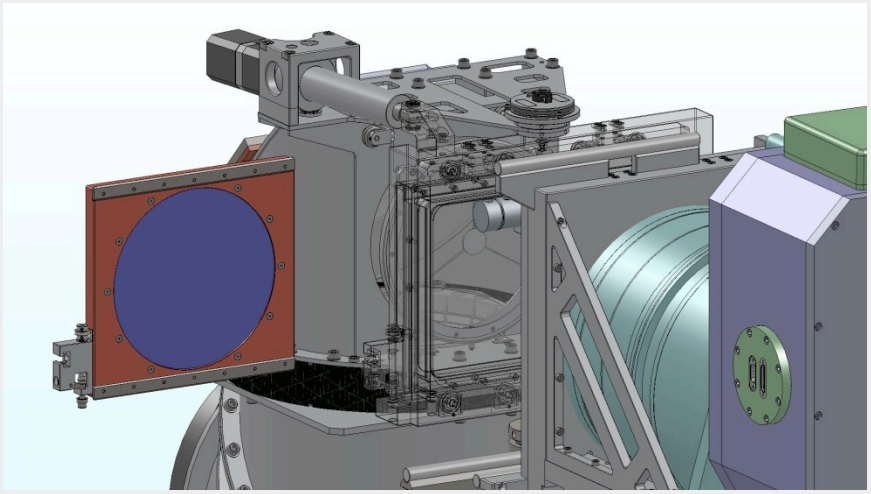
- 4 Motors
- 3 Encoders ~ 425mm travel
- End of travel sensors for rotation mechanism

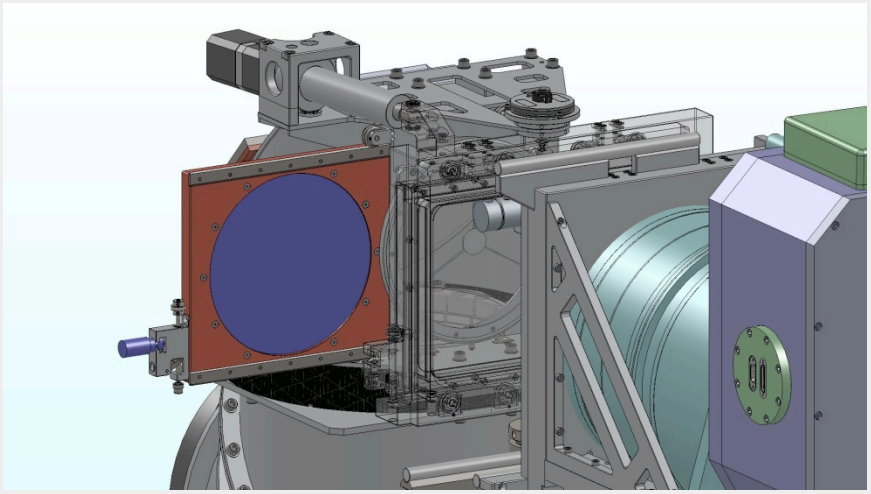


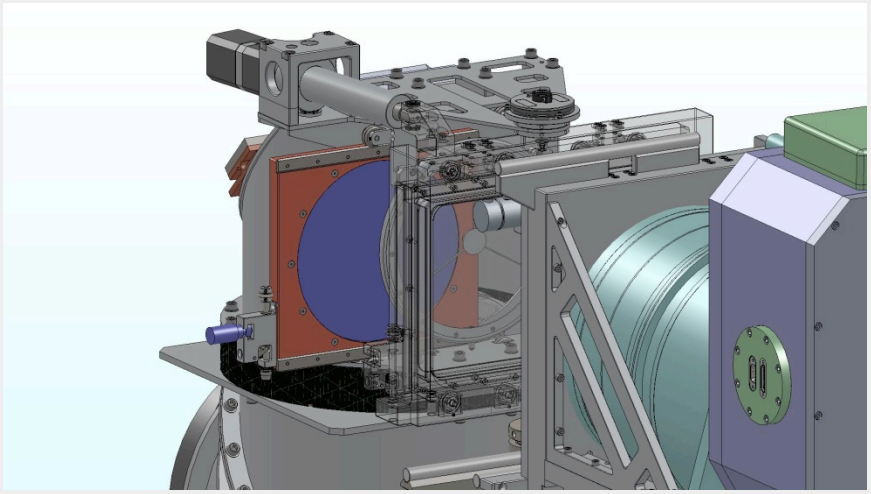
FILTER/GRATING INSERTION

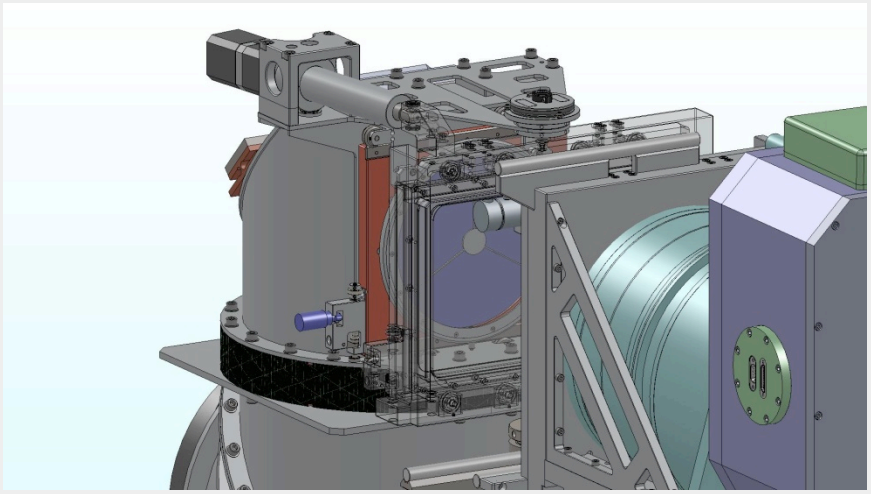


FILTER/GRATING INSERTION

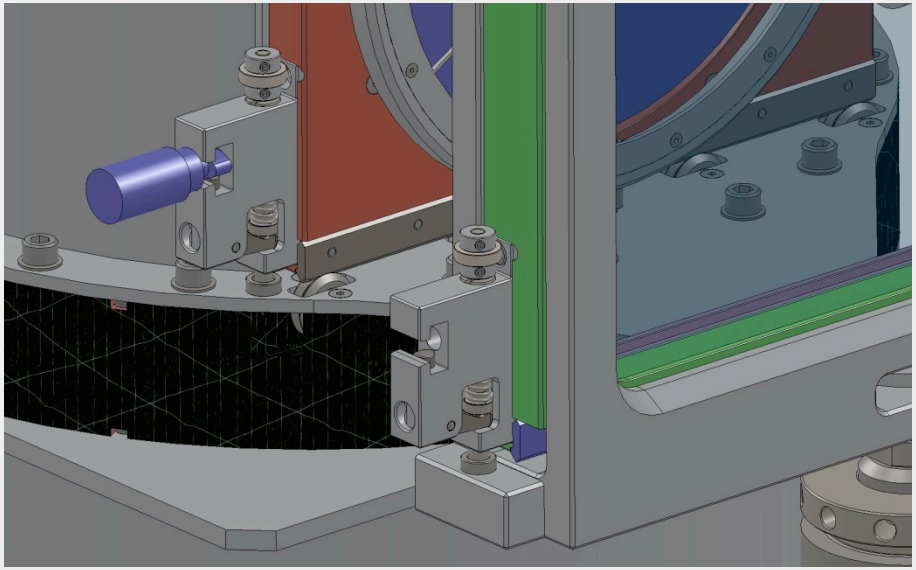


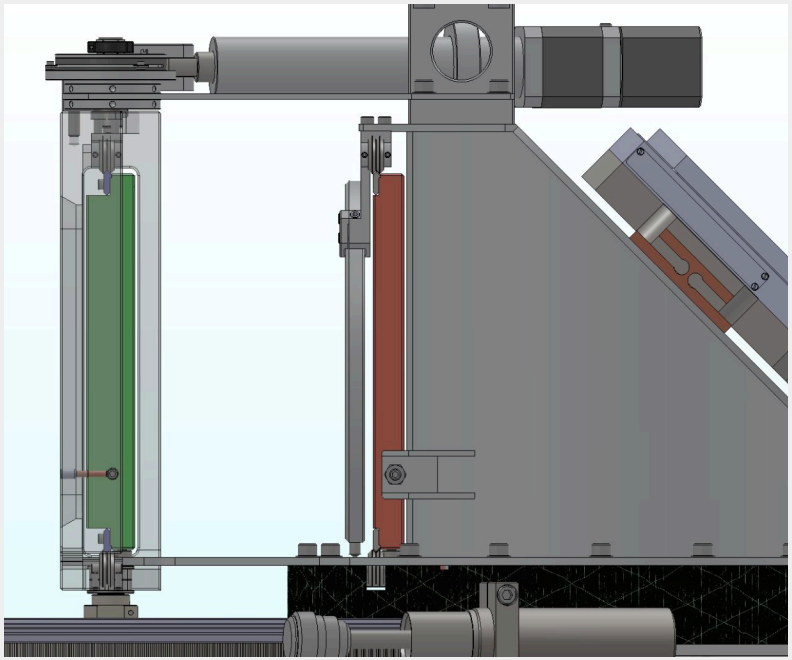




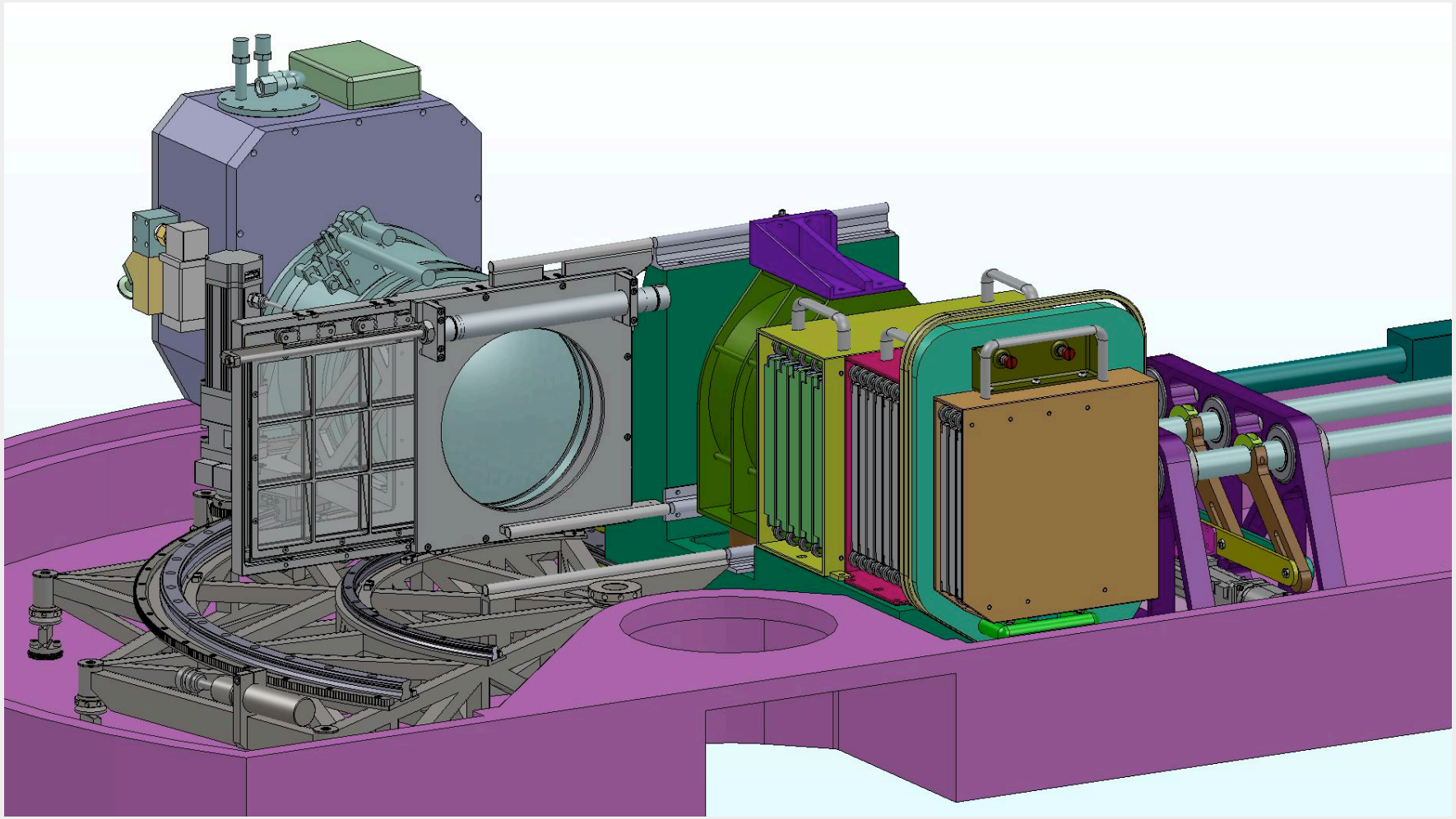


FILTER/GRATING INSERTION

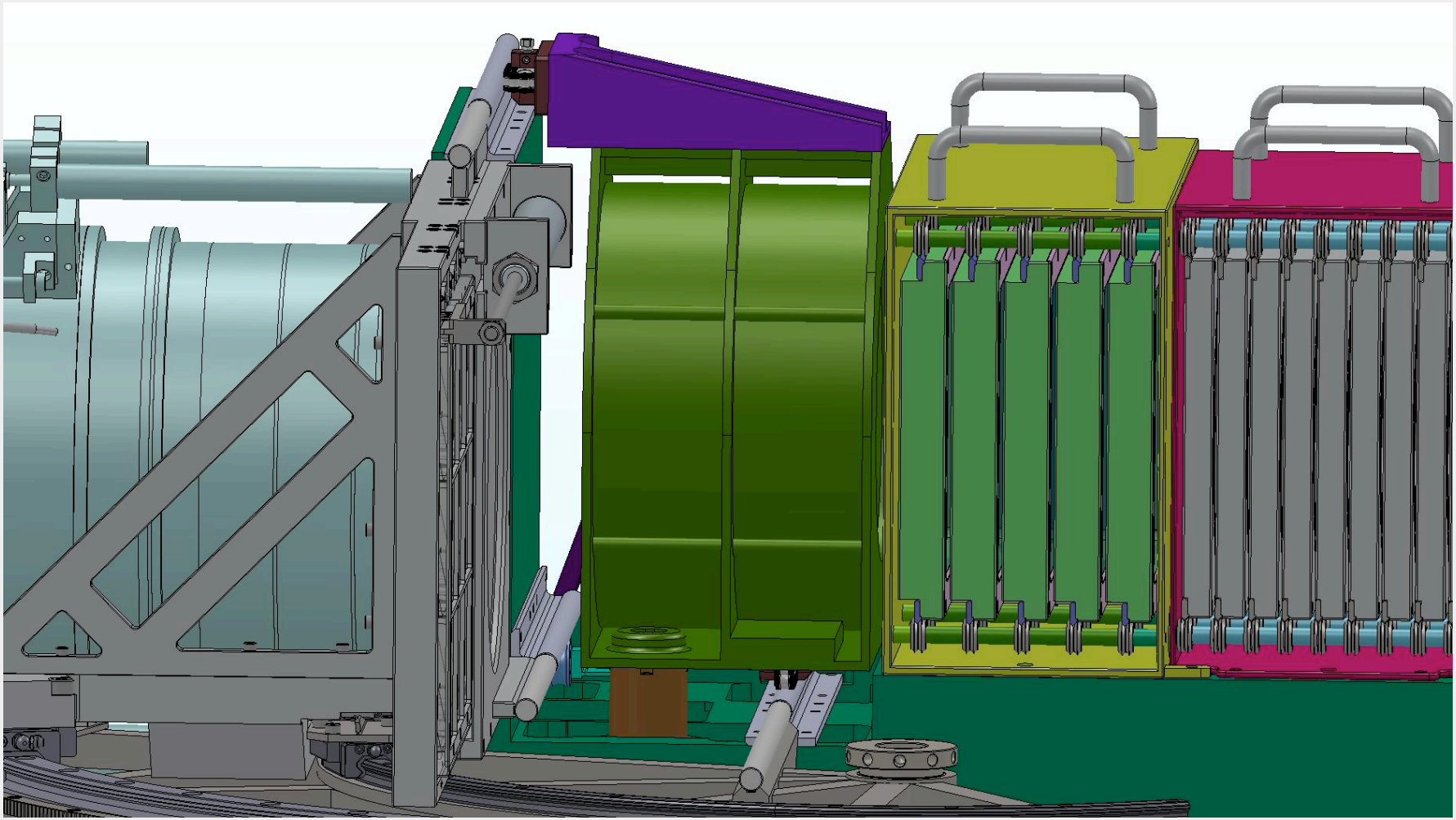




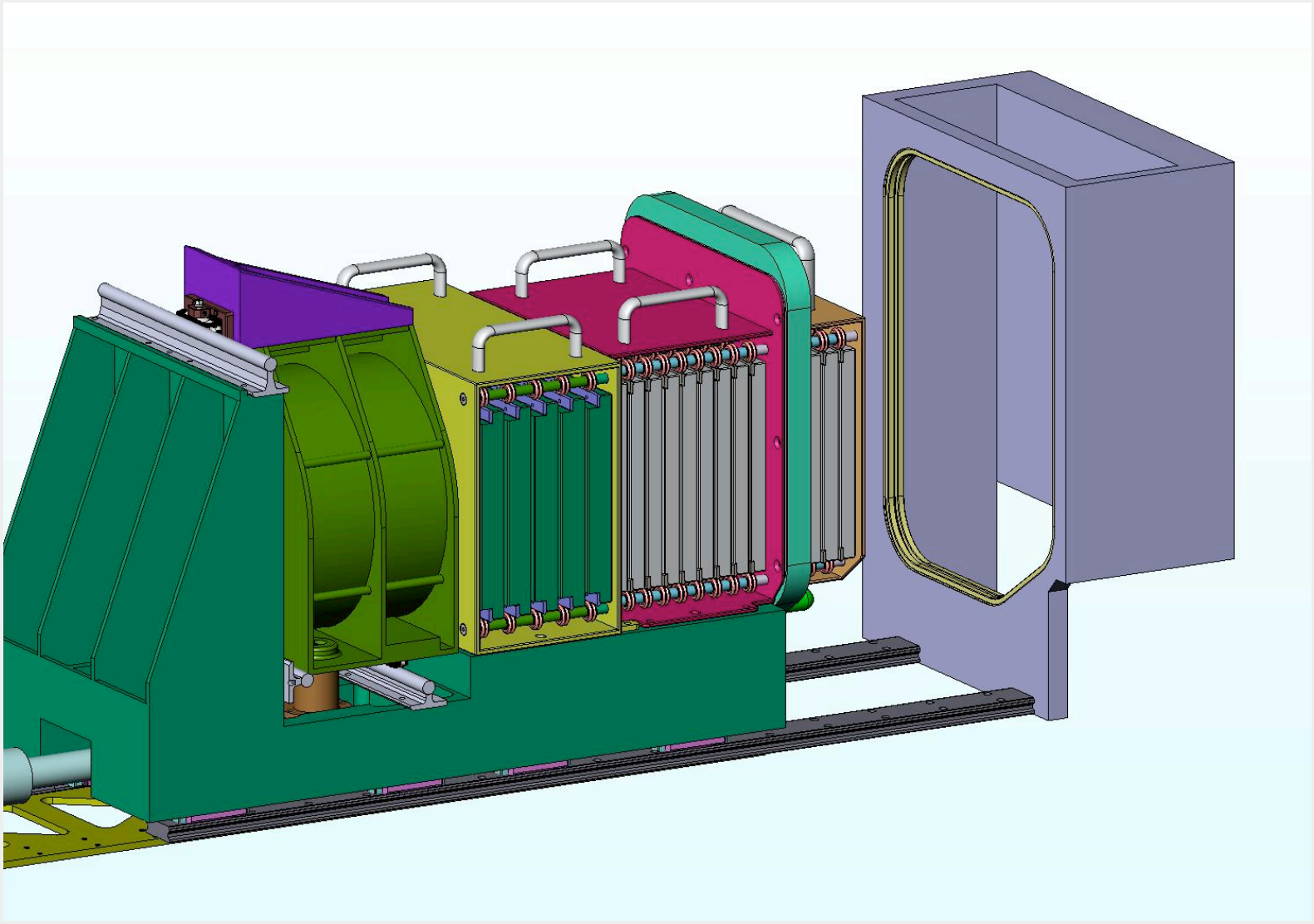
ETALON MECHANISM



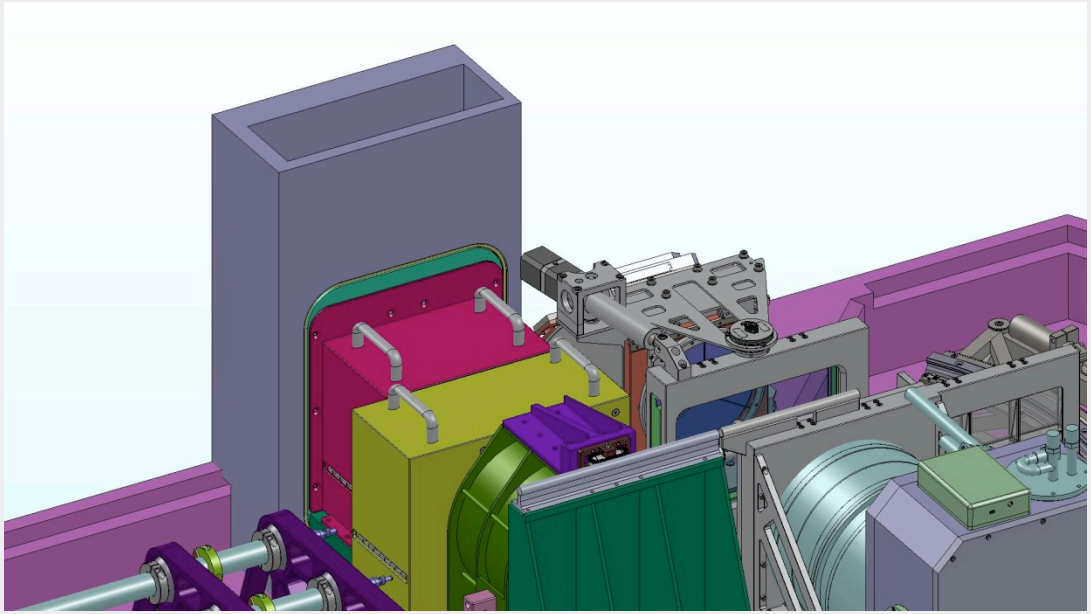
ETALON MECHANISM

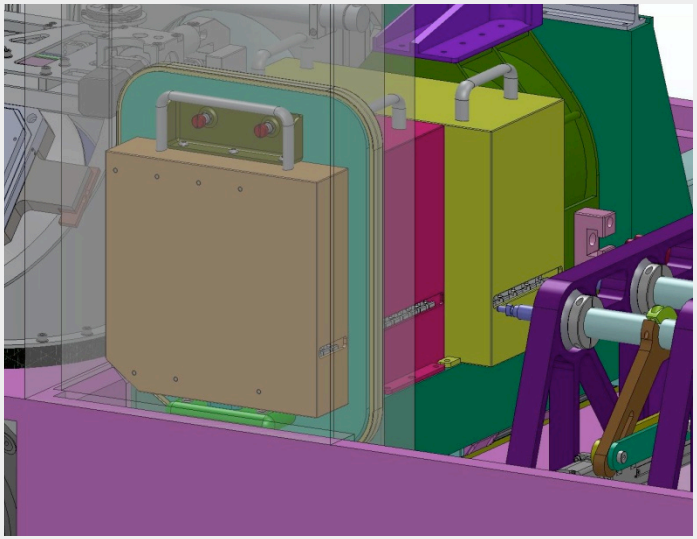


FILTER EXCHANGE MECHANISM



FILTER EXCHANGE MECHANISM





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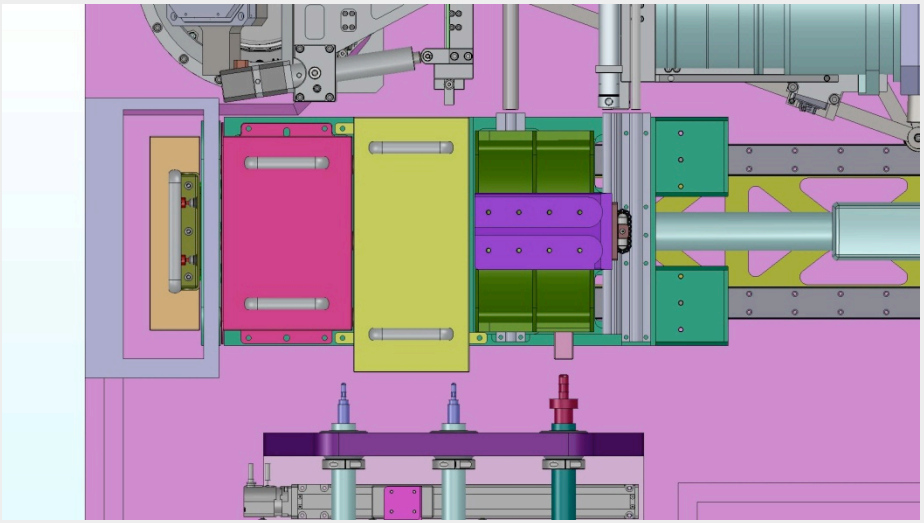

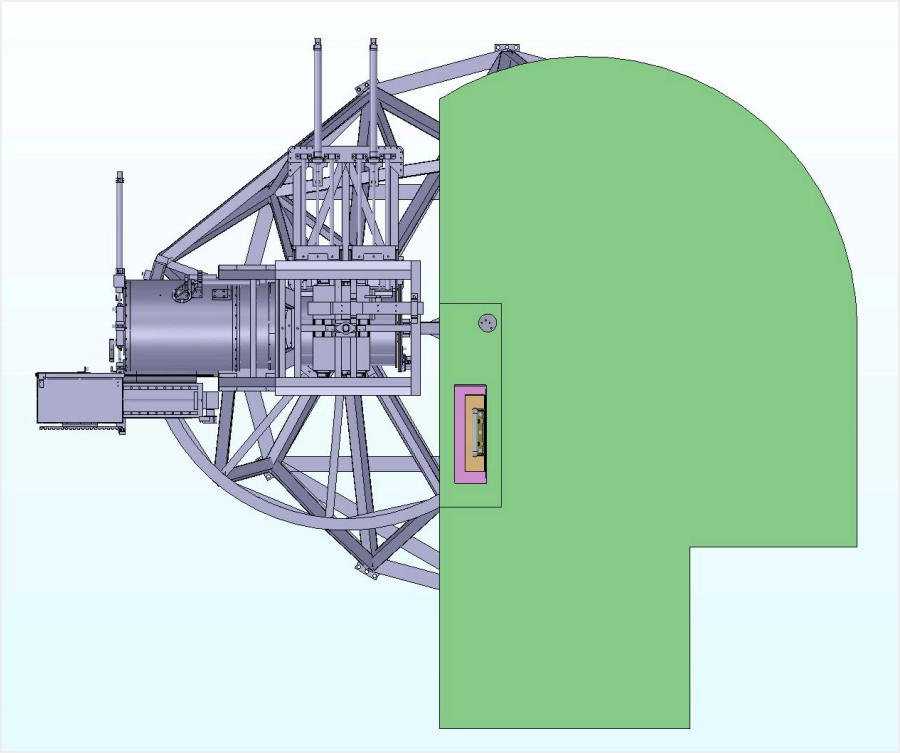

OPTICAL STORAGE ASSEMBLY