

## SPM head overview

Current state of SPM head

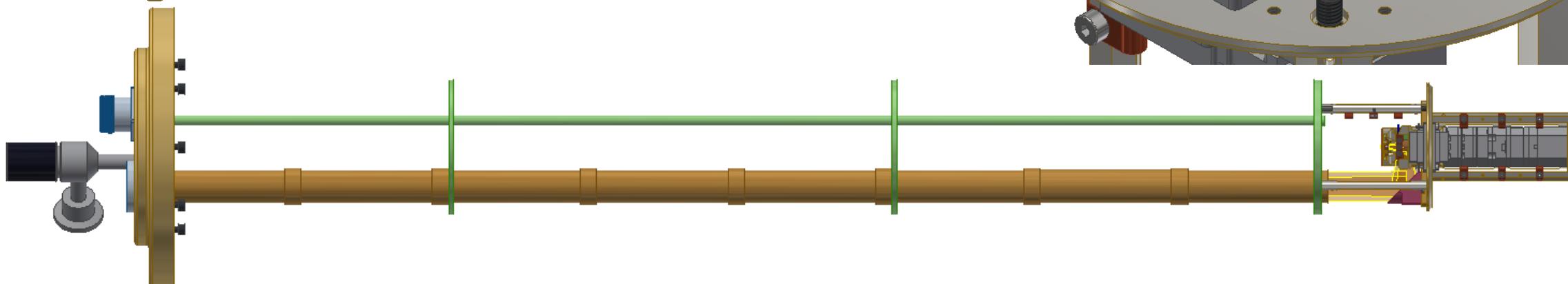
- Finalising the design
- Angular error check

Added 2 degrees of freedom

- Y axis - BUT –  $\pm 1$  mm – positioning sensor
- X axis – TK -  $\pm 1$  mm – positioning mirror

Next step

- Cable management
- Connectors



## SPM system overview

### Preamplifier

- Akiyama probe
- Tuning fork based probes
- Piezo resistive cantilevers (PRSA)
- Current amplifier (STM)

### NenoBox

- Internal PLL up to 75 kHz
- NenoView control software

### External Lock-in

- EPR signal demodulation?
- Target frequency?

To be decided

Solved

