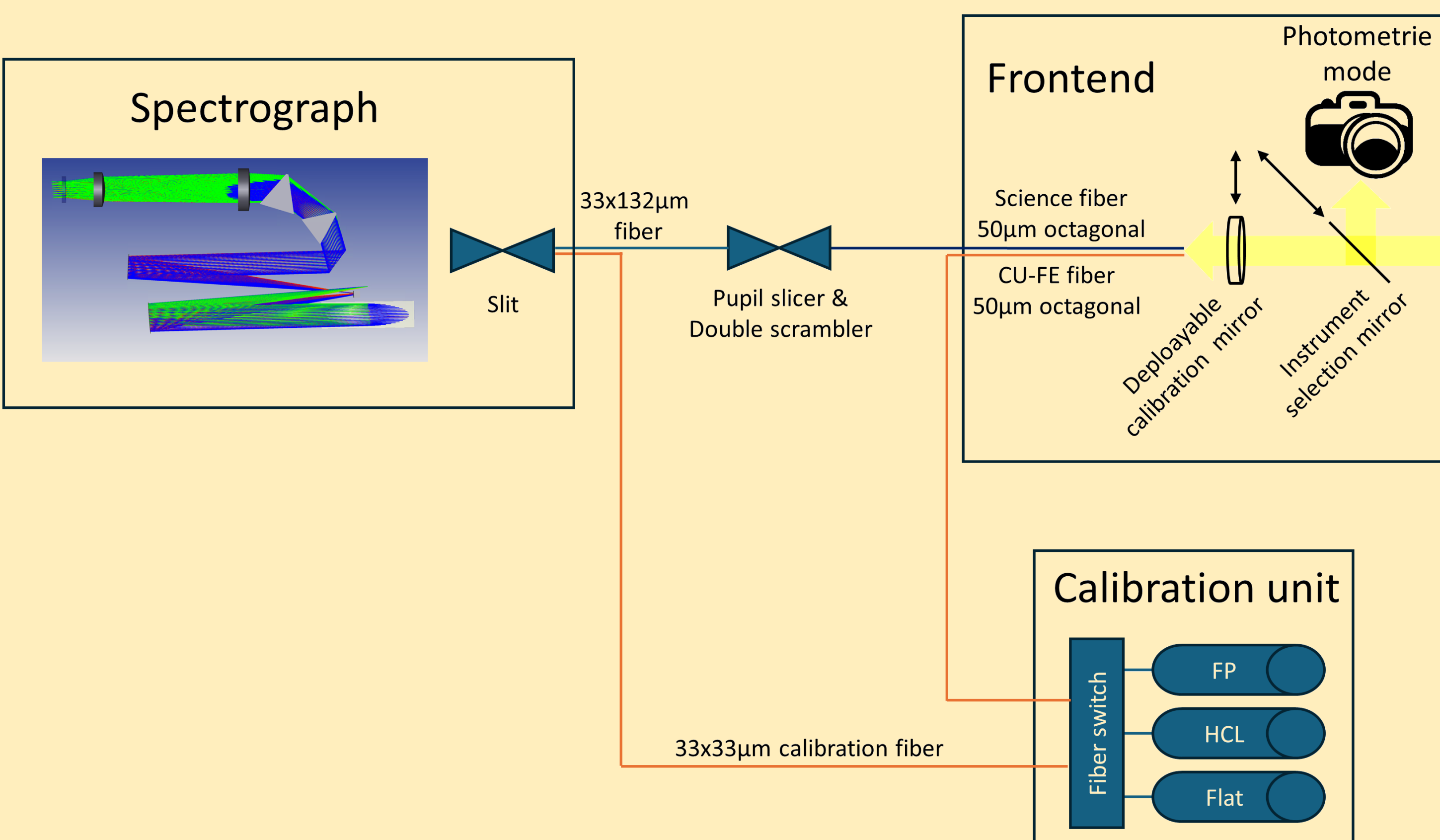
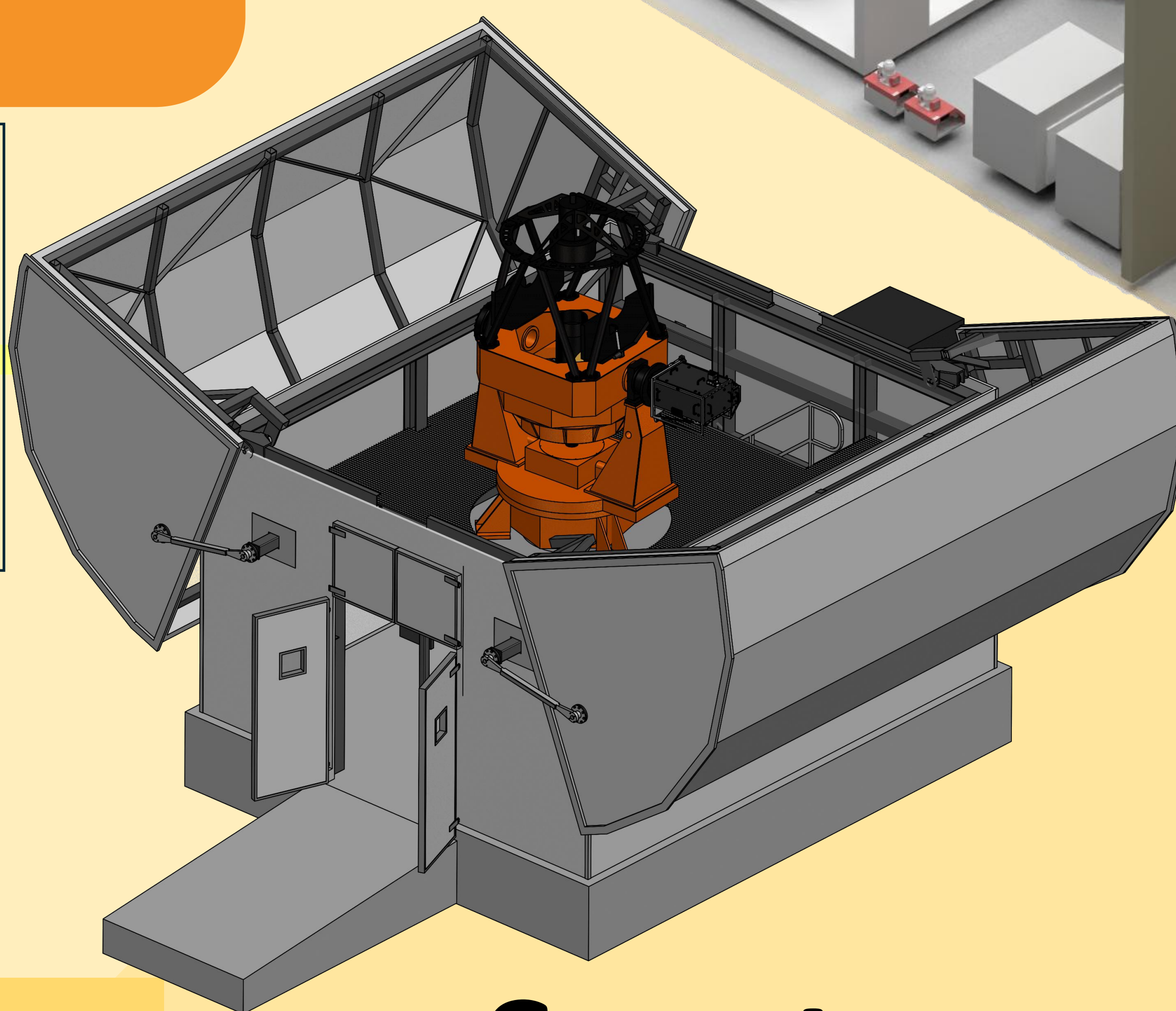
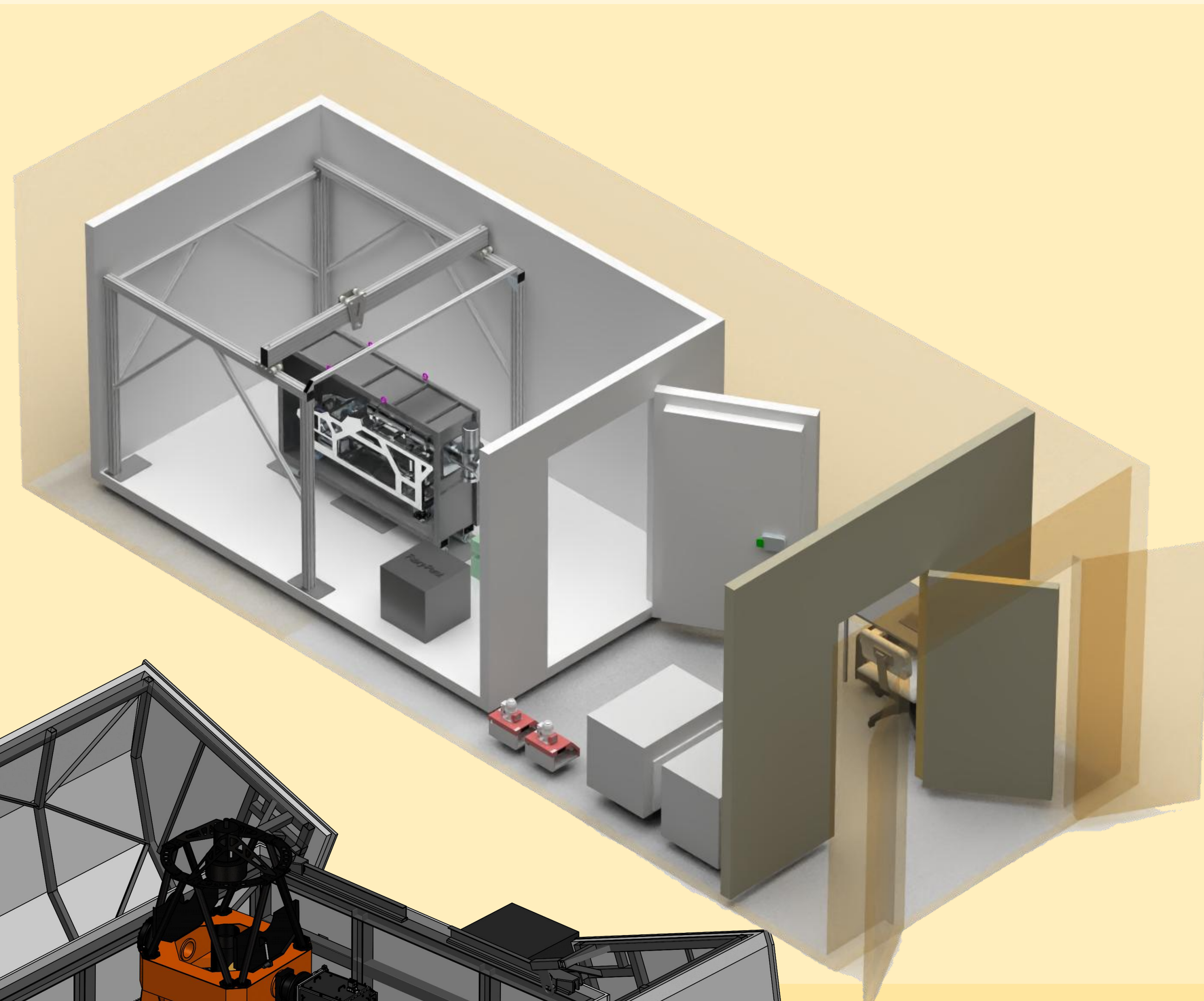


# High Performance at a Small Telescope

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## MONET North Telescope

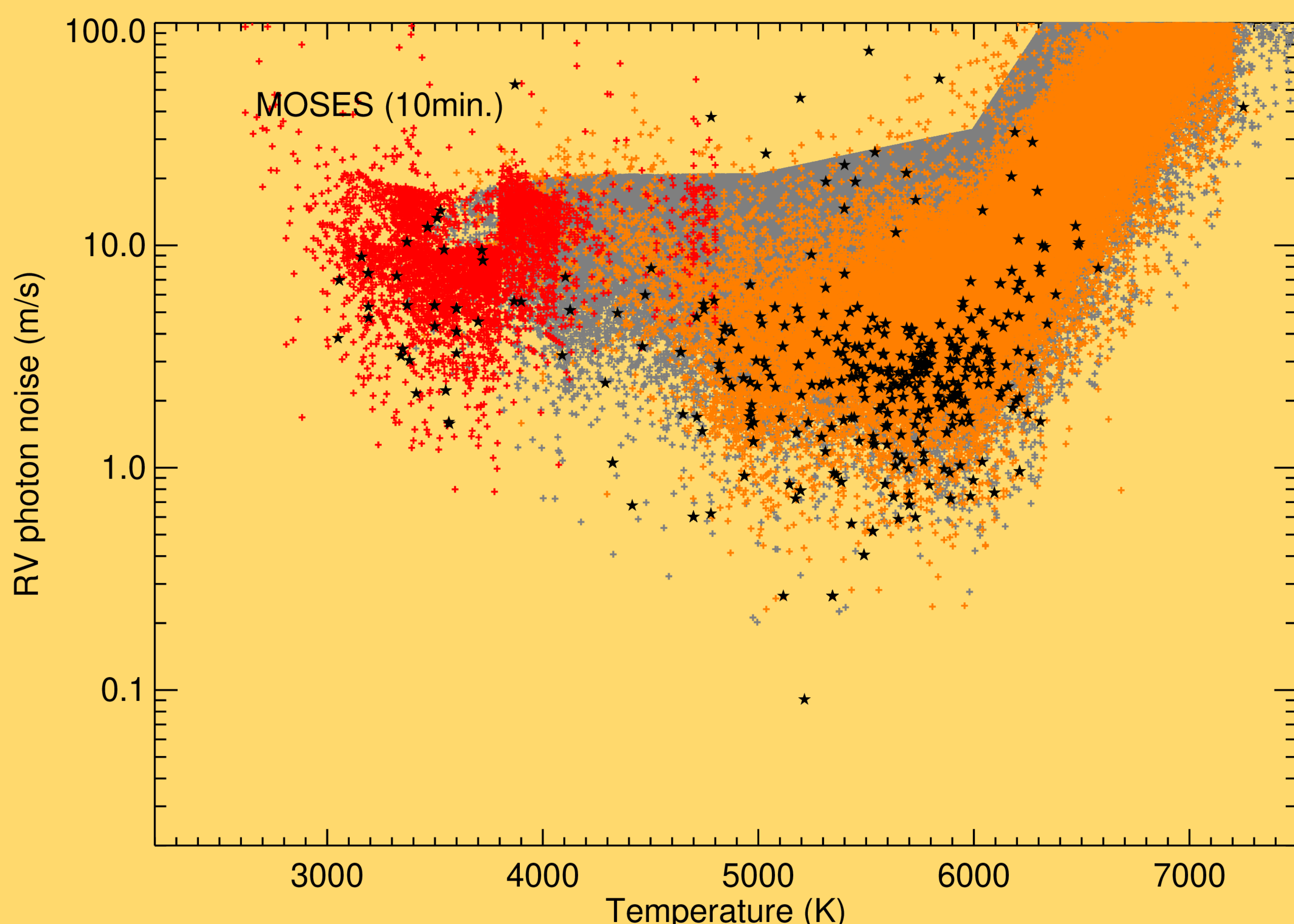
- Located at McDonald Observatory (height: 2077m)
- M1 diameter: 1.2m
- Fully robotic
- Fiber injection unit utilizing fast tip/tilt mirror
- Separate building for spectrograph with temperature stabilization



## Science Case

### Long-term monitoring of sun-like stars:

- Search for outer planets of solar system twins
- Long-term activity monitoring of sun-like stars
- Planetary masses from long-term dynamical interaction

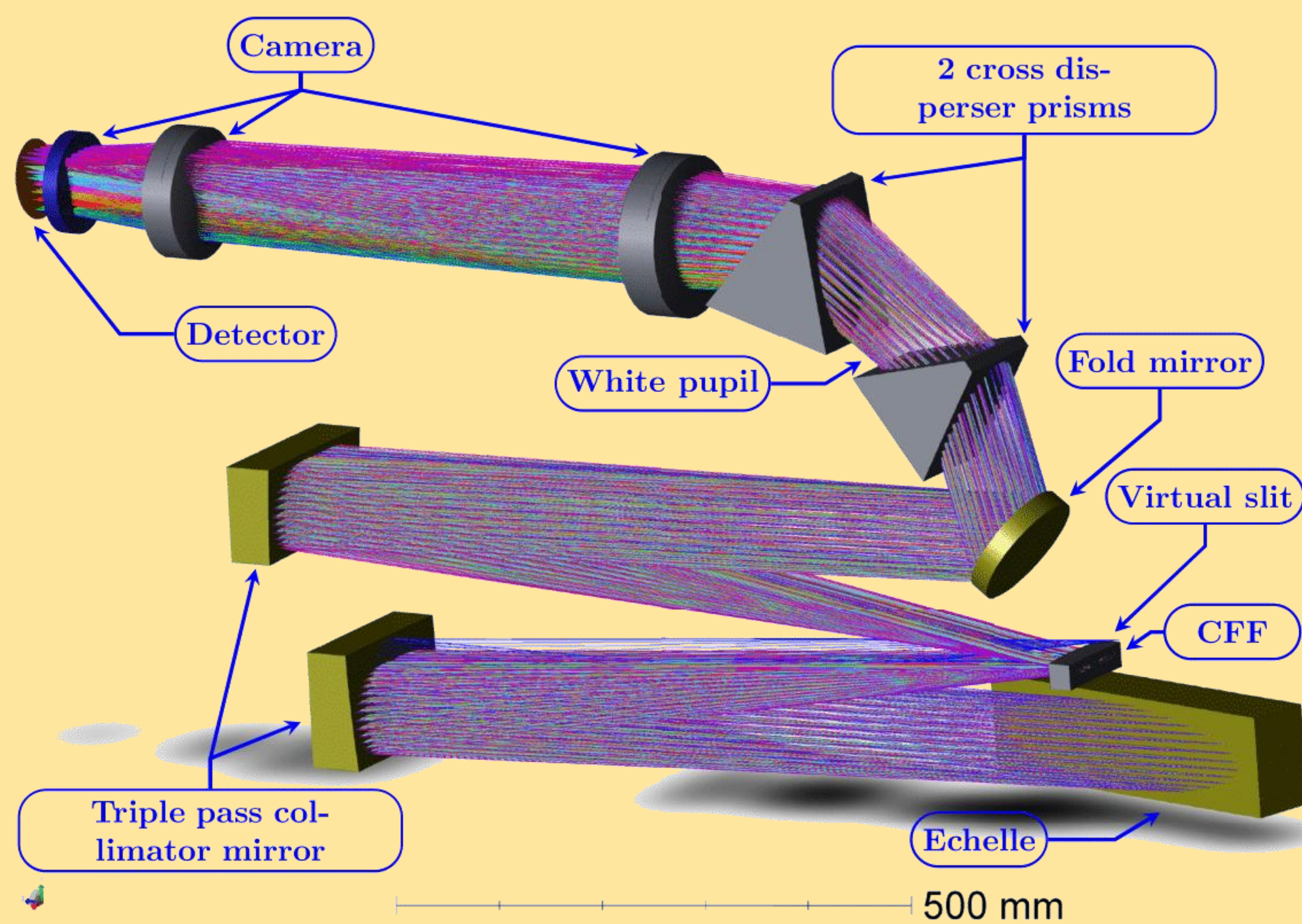


RV photon noise achievable in a 10 minute observation:

- Orange: F-, G-, K-stars (Chandler et al., 2016; Nordström et al., 2004; Brewer et al., 2016)
- Red: Cool dwarfs (Gaidos et al., 2014; Fouqué et al., 2018; Terrien et al., 2015; Reiners and Basri, 2009)
- Grey: Gaia DR2 and Andrae et al (2018)

## Spectrograph

- Resolving power: >82,000
- Wavelength coverage: 380-680nm
- Vacuum vessel
- STA 4k Detector system
- RV precision (internal): 2m/s



Questions?

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