

**Jan Geralt
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Head of Instrument Science

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Staff and Locations



- One Institute, two locations, ~190 staff (~140 Leiden, ~50 Groningen)
- Scientists/Instrument Scientists (50%), Engineers (30%), Staff and support (20%)

SRON Research Themes

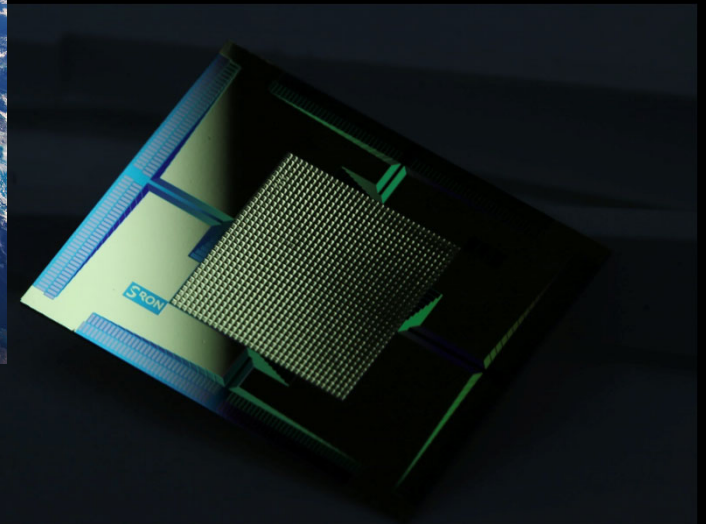


*Astrophysics
and Exoplanets*

*Earth Observation
and Climate Studies*



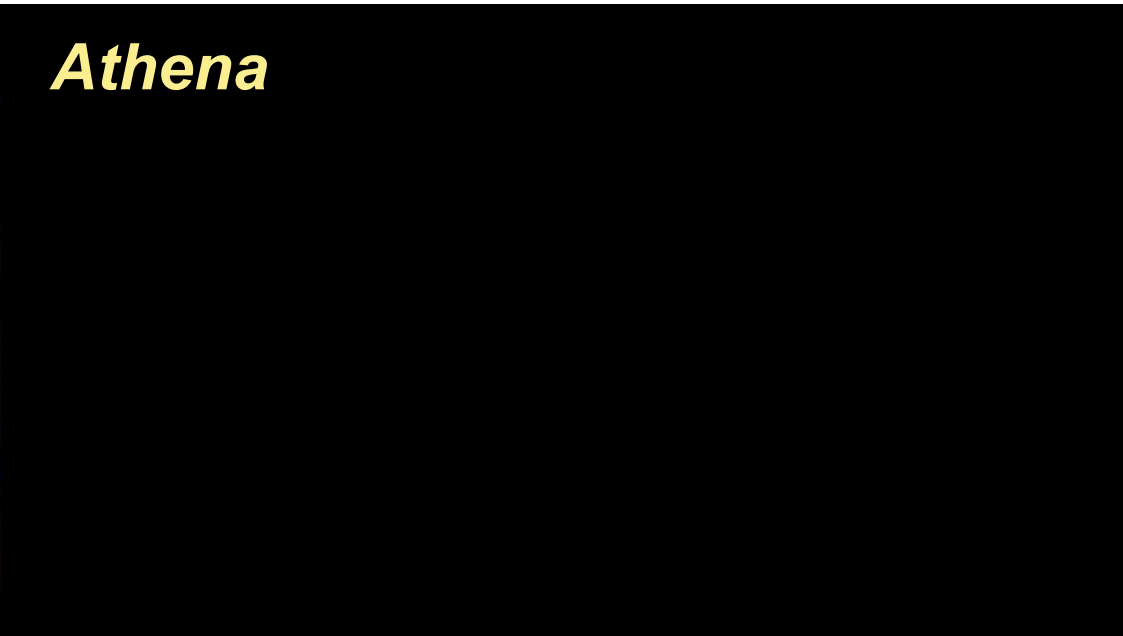
*Technology and
Instrumentation*



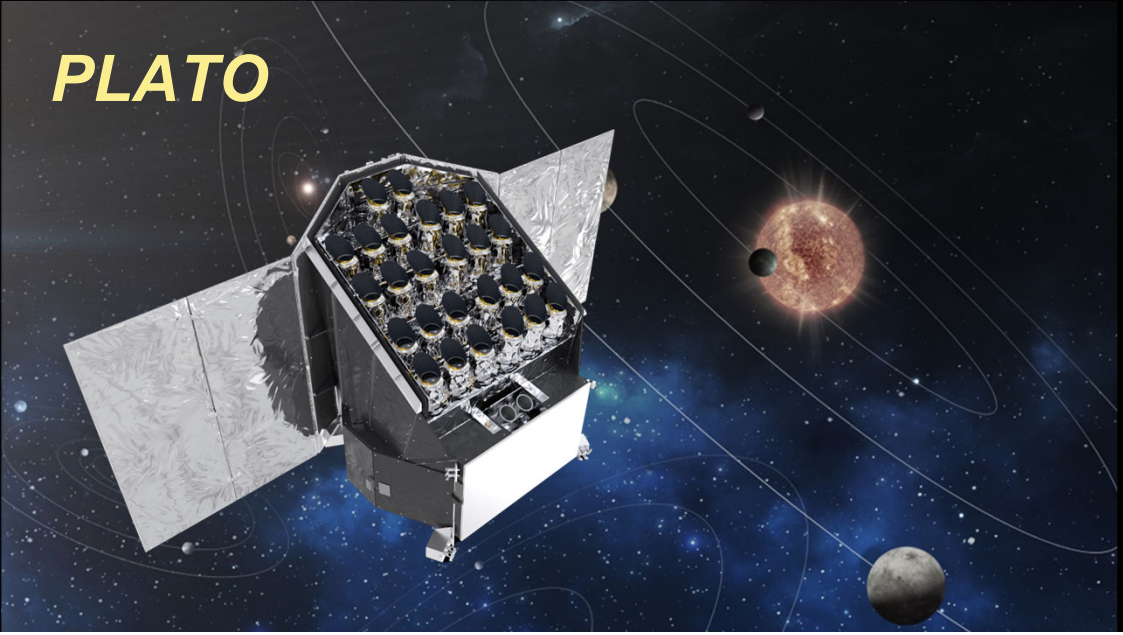
JWST



Athena



PLATO



LISA

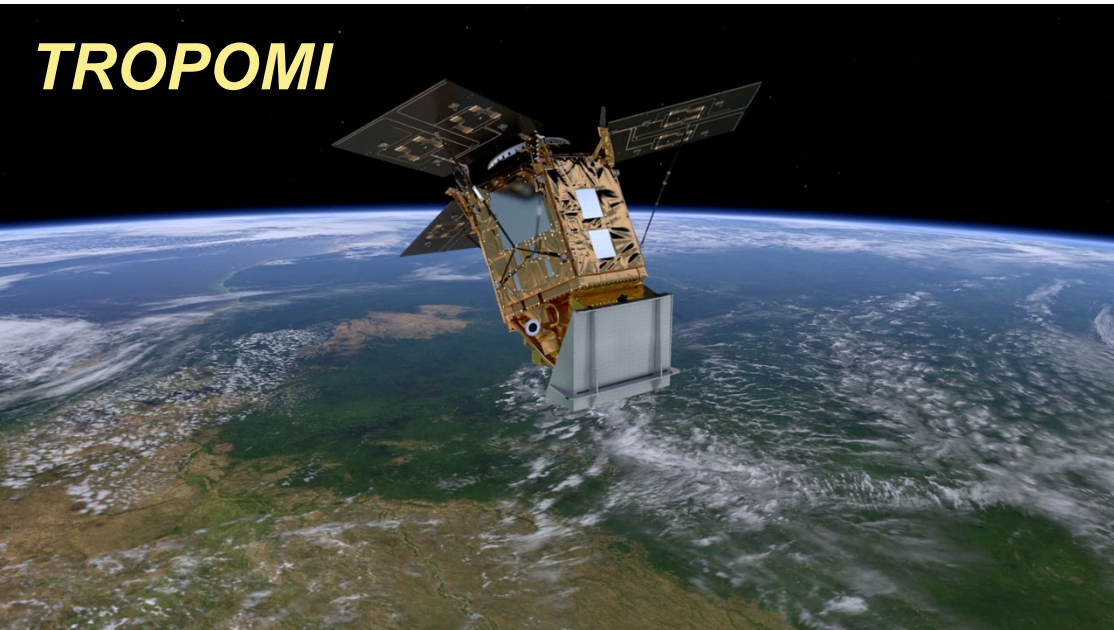


What is PRIMA?

| | |
|--|---|
| Telescope | 1.8-m, all aluminum, 4.5 Kelvin |
| PRIMAger Imager & polarimeter | R = 10 hyperspectral imaging 25-80 μm R= 4 imaging & polarimetry 91-261 μm |
| FIRES Spectrometer | R > 85 spectroscopy 24-235 μm High-Res mode R = 4,400 x ($\lambda/112\mu\text{m}$) |
| Detectors | 100 mK KID arrays (~11k total) |
| Data | IPAC |
| Orbit | Earth-Sun L2 |
| Launch | 2032 |
| Observations | 75% GO, 25% PI (\rightarrow GI) |



TROPOMI



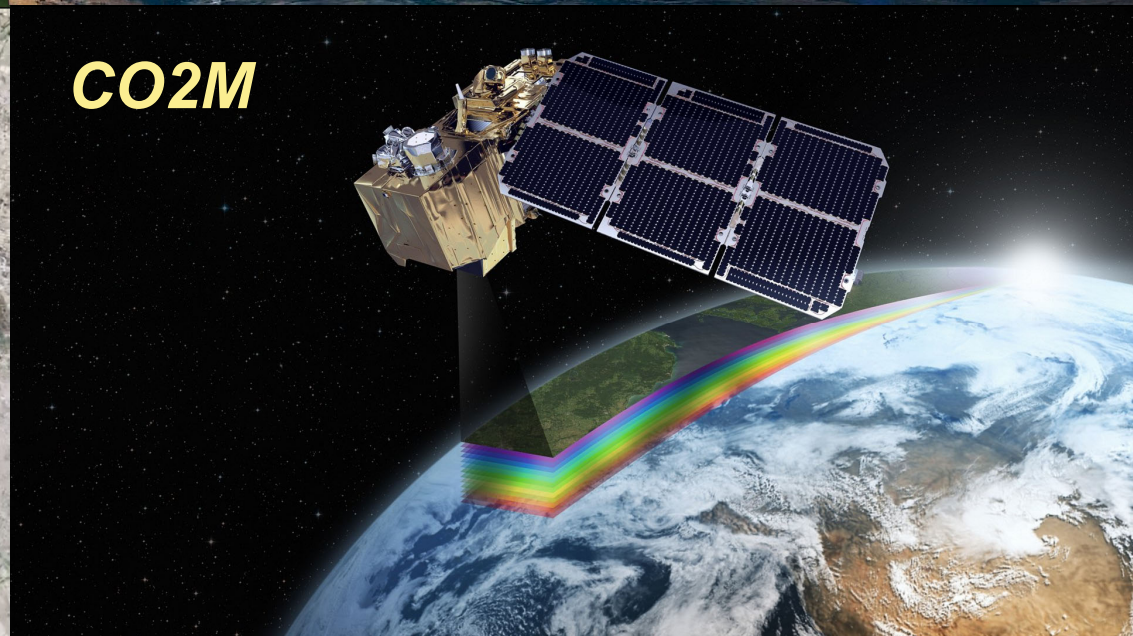
PACE



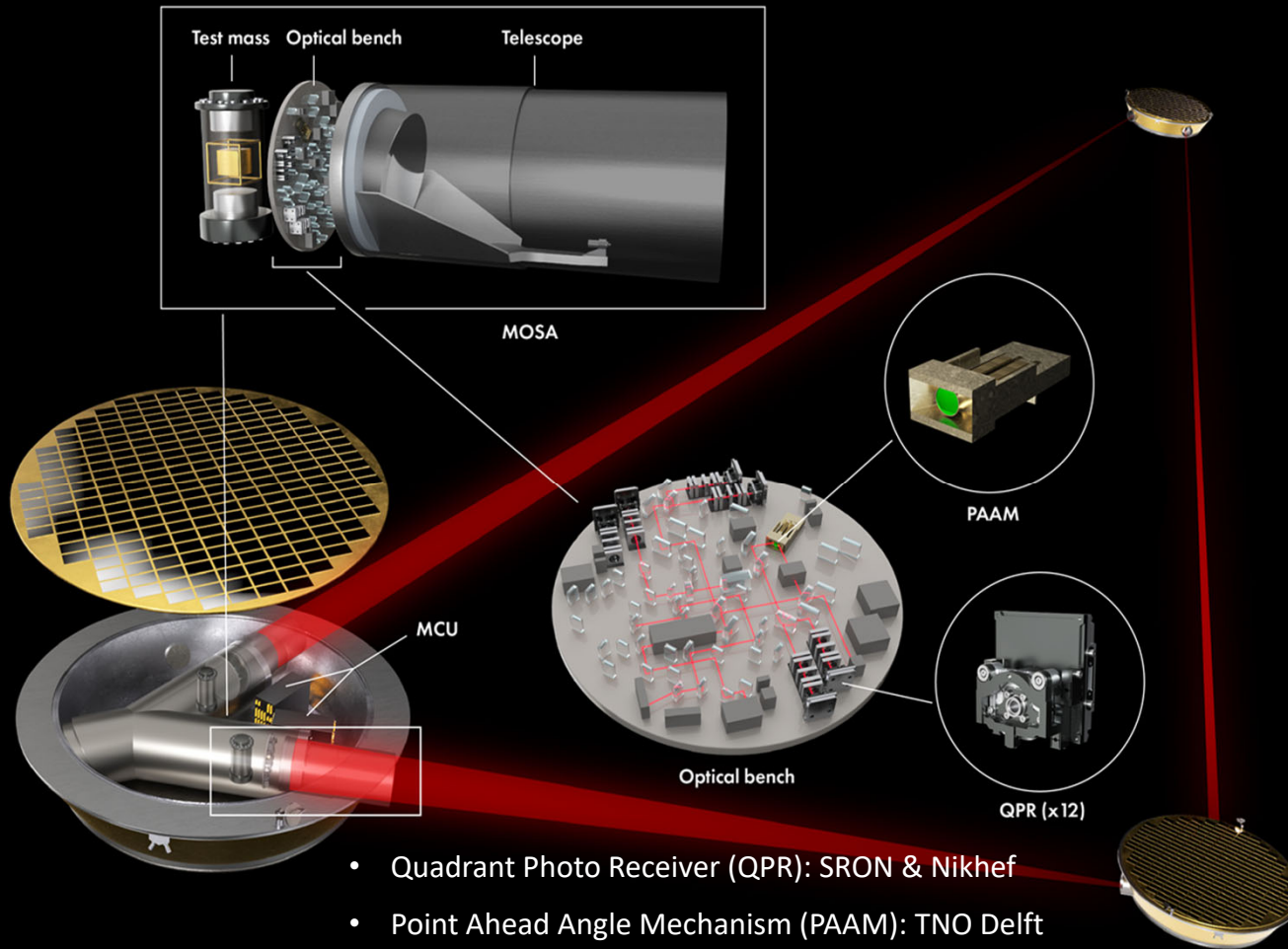
TANGO



CO2M

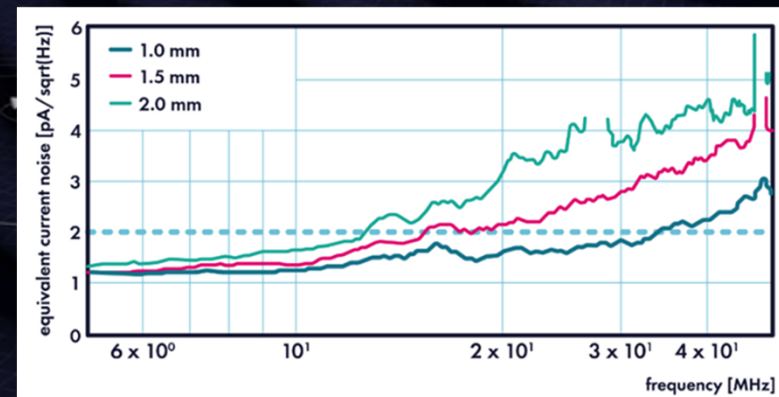
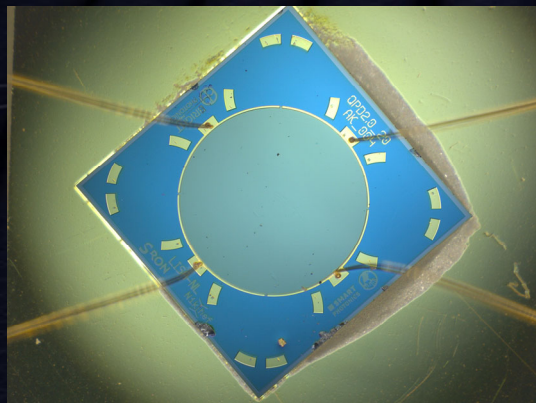
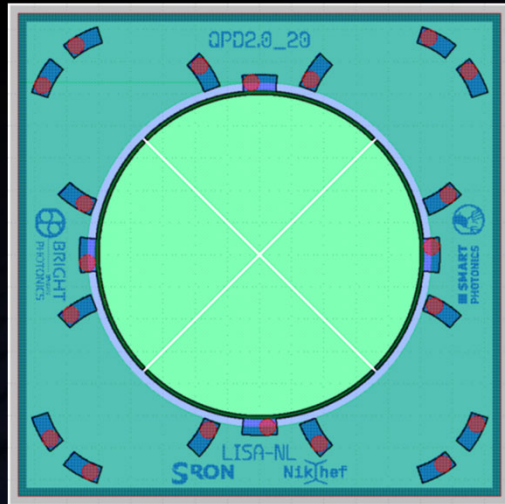


Dutch contributions



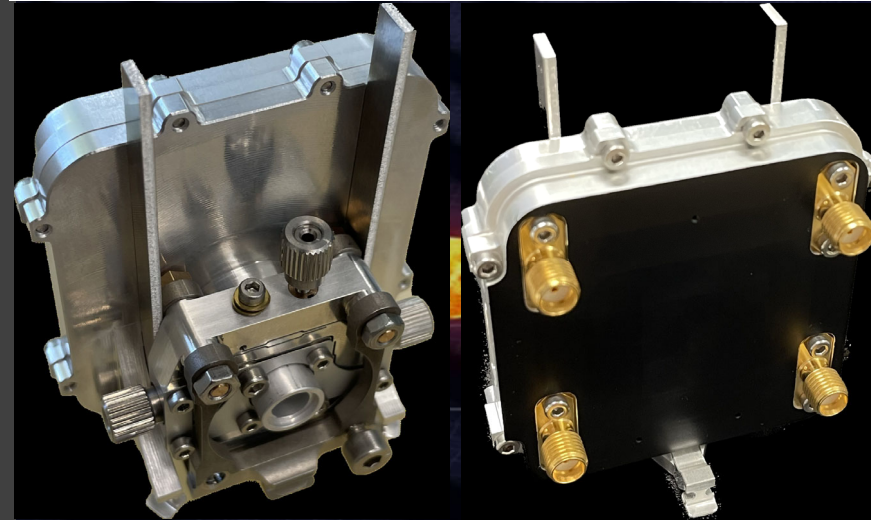
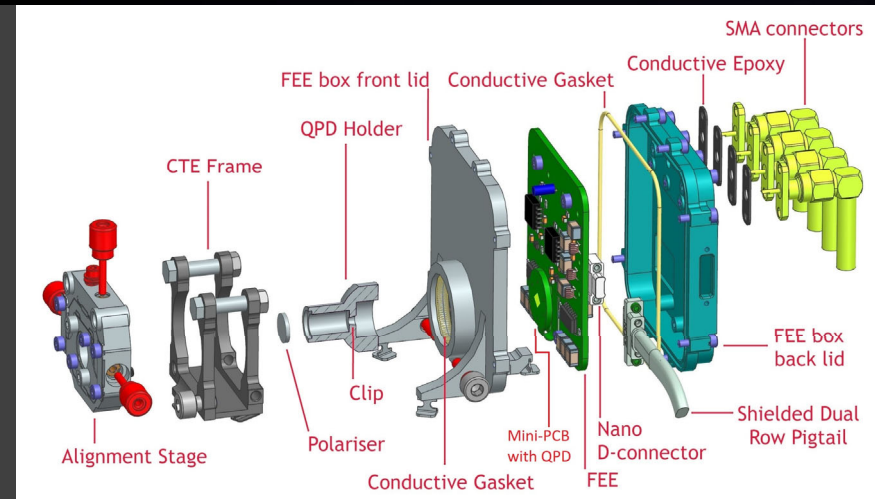
- Quadrant Photo Receiver (QPR): SRON & Nikhef
- Point Ahead Angle Mechanism (PAAM): TNO Delft
- Mechanisms Control Unit (MCU): SRON

QPD development

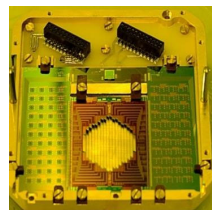
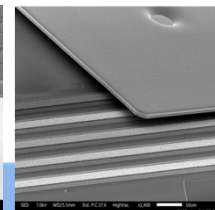
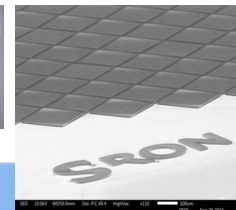
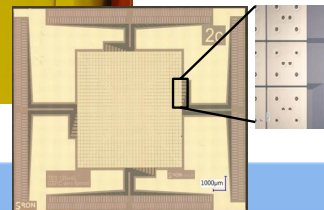


Quadrant Photo Receiver

- Quadrant Photo Diode (Nikhef, SRON, Bright Photonics)
- Front-end electronics (Albert Einstein Institute Hannover, KU Leuven)
- Housing (SRON, Nikhef)
- Quality assurance and project management (SRON)
- Testing (above institutes and ESTEC, NLR, Observatoire Cote d'Azur)
- Dutch team: 18 @ SRON & Nikhef (50/50 effort)



R&D



SRON

PLATO

