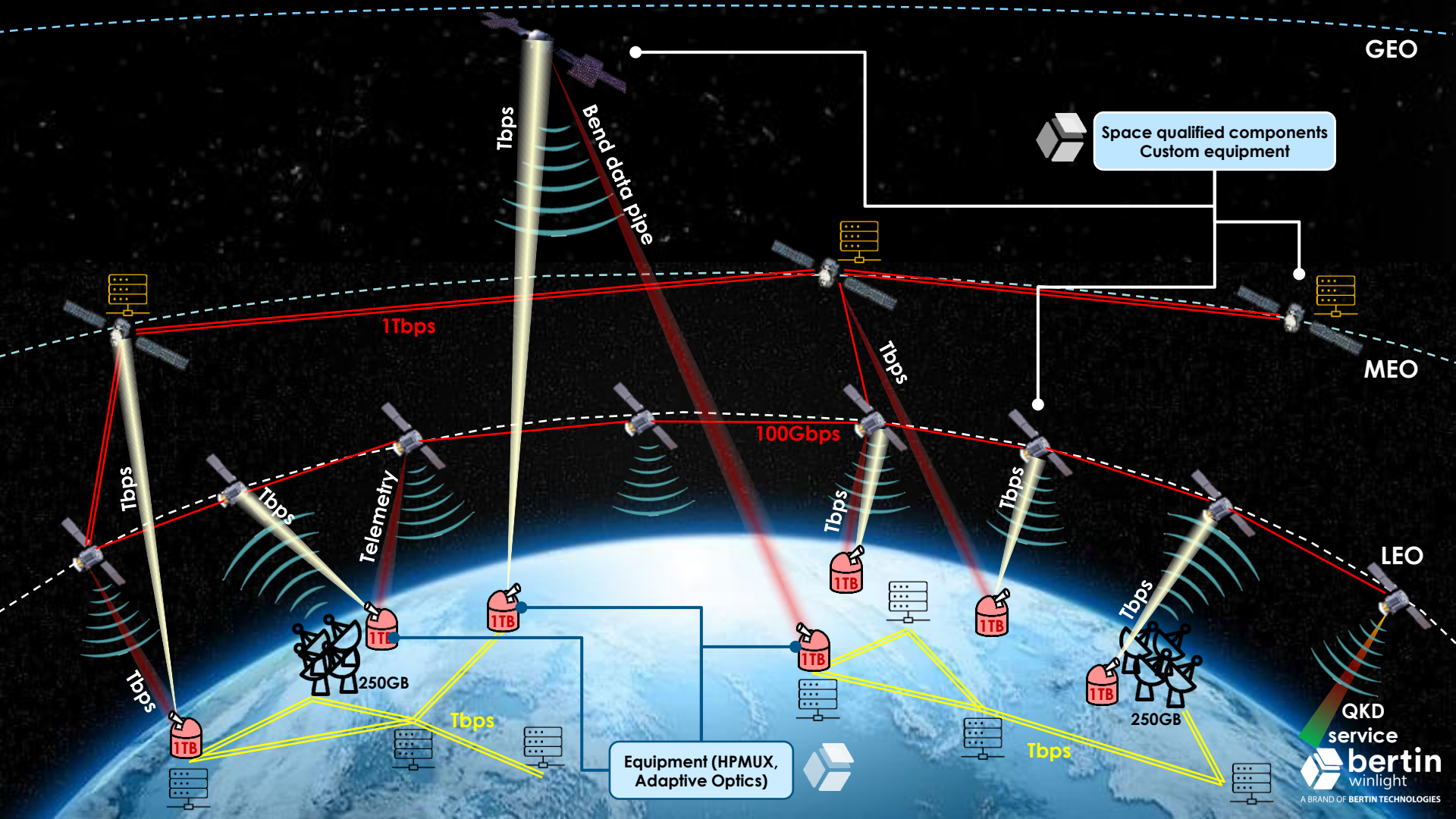


**Serving the free
space segment of
free space optical
communications**

G. CHAU
WEBINAR | 2026.09.14

EPIC Photonics for Earth-to-
Space Optical
Communication



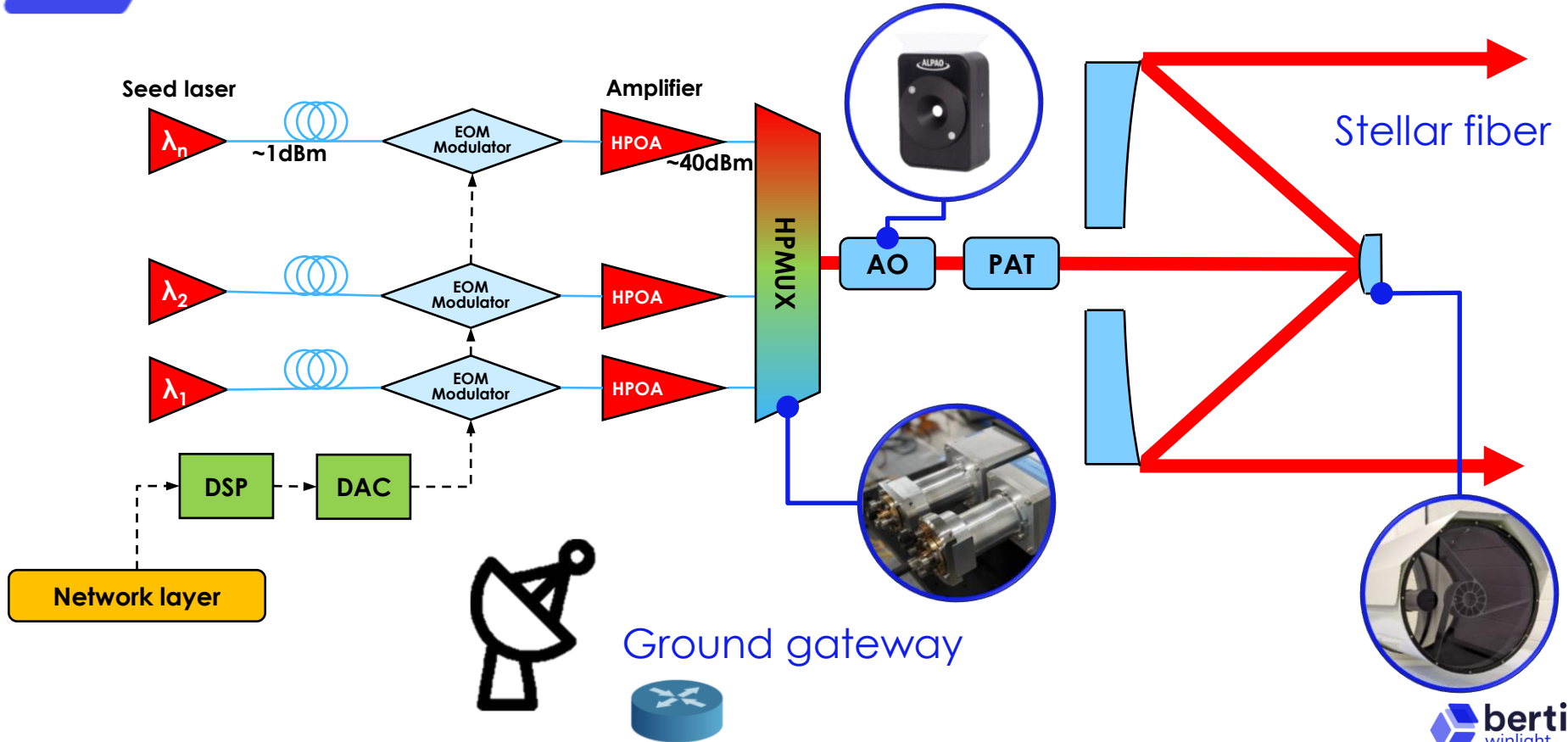




GROUND INDUSTRIAL SOLUTIONS



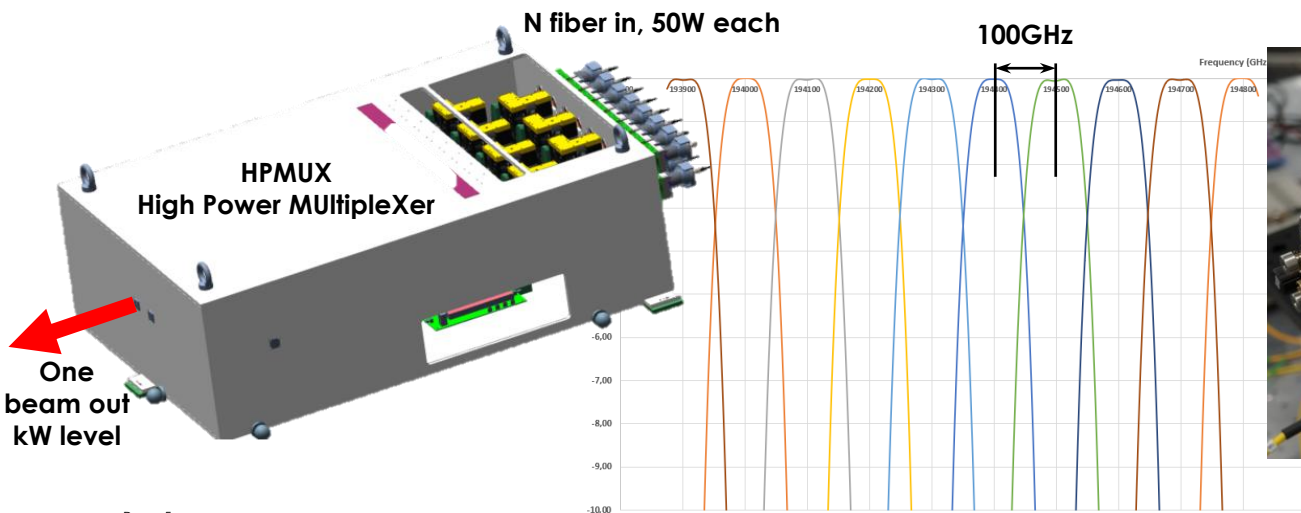
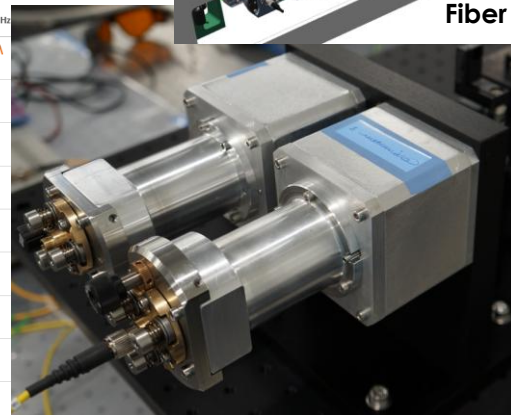
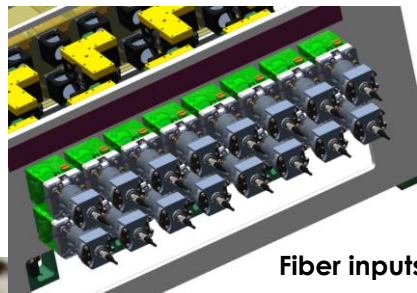
GROUND STATION ARCHITECTURE, UPLINK



GROUND TELECOM

HPMUX solution to perform WDM with high power channel

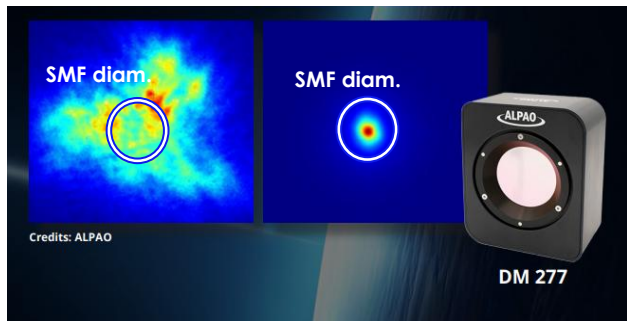
- Key component for Tbps optical link
- Patented Lyot filter approach
- Capacity beyond 1kW output power
- Up to 64 channels, 100GHz spacing



BERTIN ALPAO'S DEFORMABLE MIRROR

Full atmospheric mitigation suite

Deformable Mirror



Wavefront sensor



Real time computer
(fastest in the market)



BERTIN ALPAO'S DEFORMABLE MIRROR

Best companion for cross
atmospheric broadband link

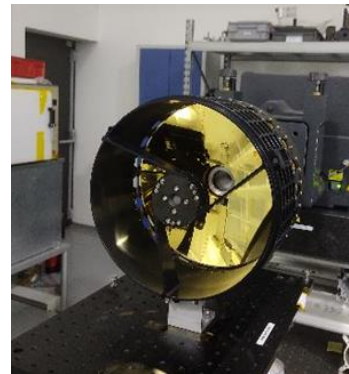
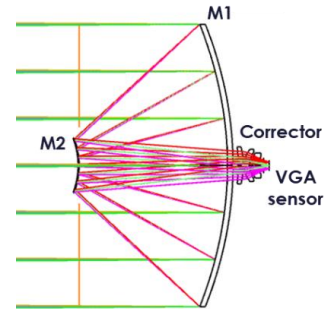
- ❖ Better link budget → Less laser power
- ❖ Cost saving by reducing size of telescope
- ❖ Available for downlink and uplink



GROUND TELESCOPE

Multiple ground telescope designed, manufactured, qualified and delivered for long range imaging purposes

- On site system, mounted on tripods (400mm typical)
- On vehicule systems, mounted on touret (250mm typical)

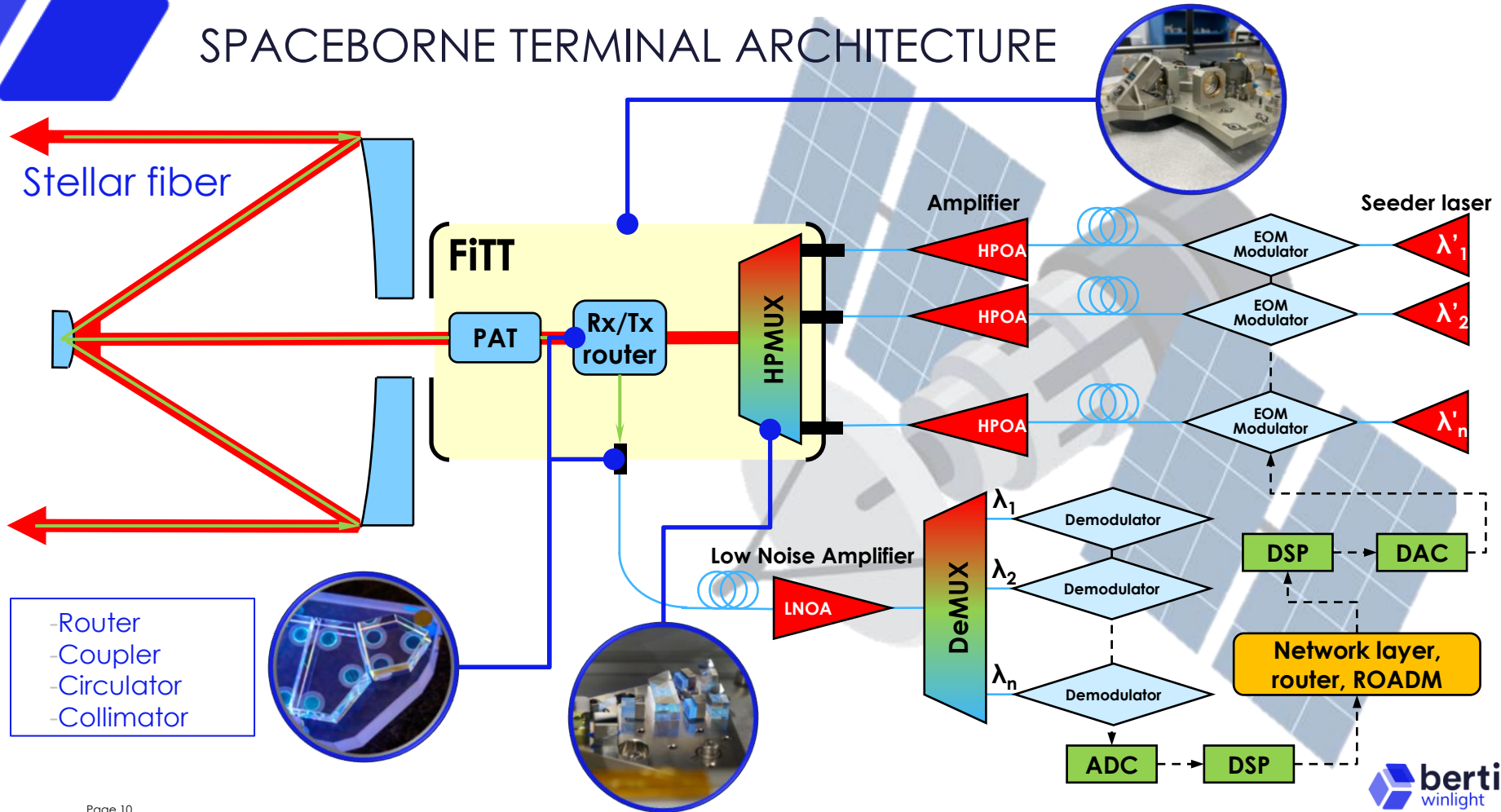




SPACEBORNE CUSTOM AND TAYLORED SOLUTIONS



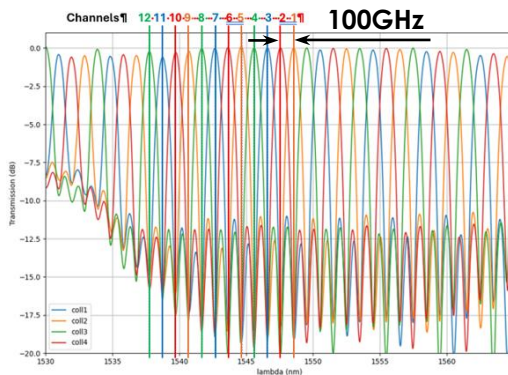
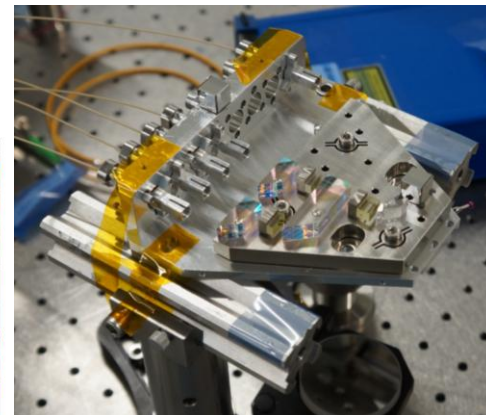
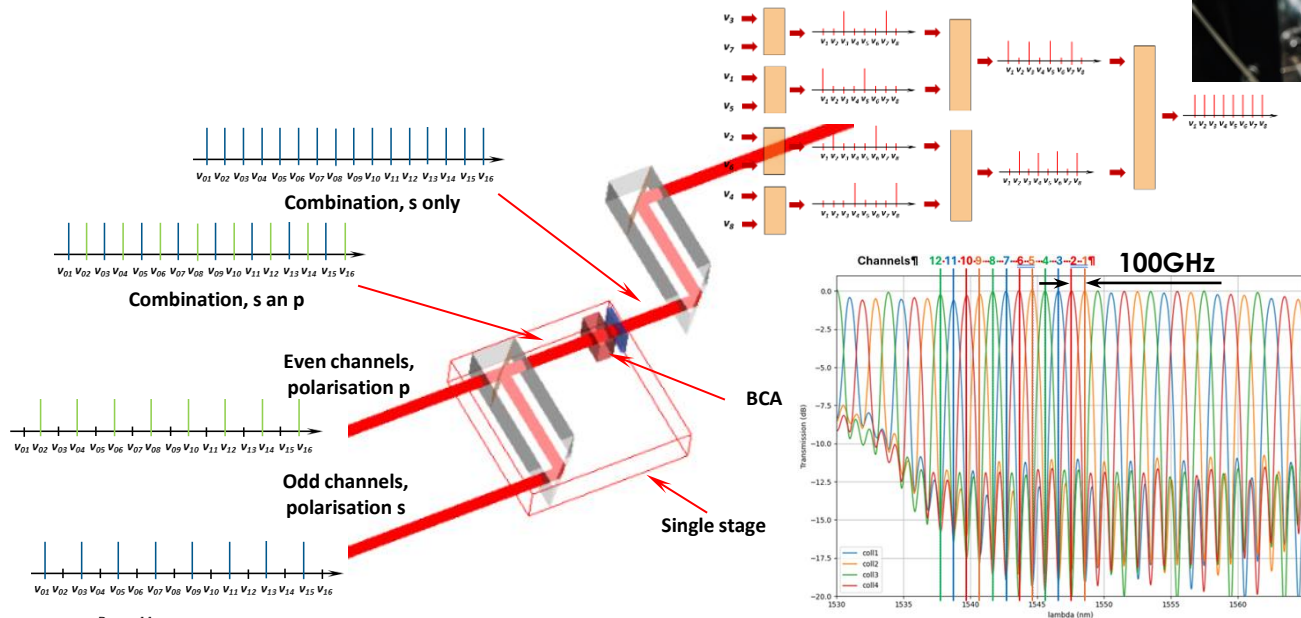
SPACEBORNE TERMINAL ARCHITECTURE



SPACEBORNE HPMUX

Low SWaP HPMUX

- Stand alone or FiTT compatible
- Patented HPMUX technology using Lyott filters

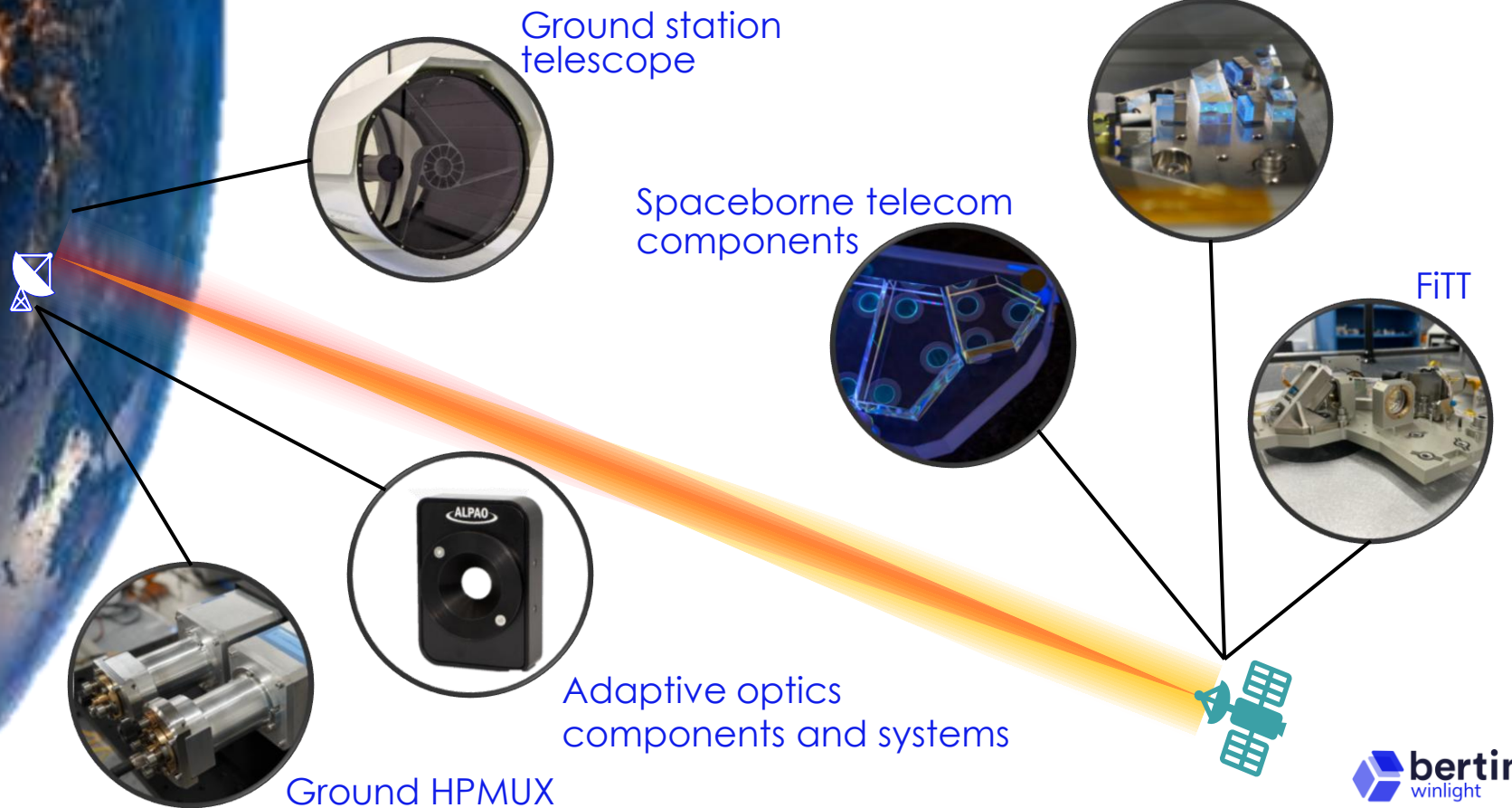




WRAP UP



BERTIN TECHNOLOGIE'S OFFER





THANK YOU FOR YOUR ATTENTION
QUESTIONS?

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Technical manager
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