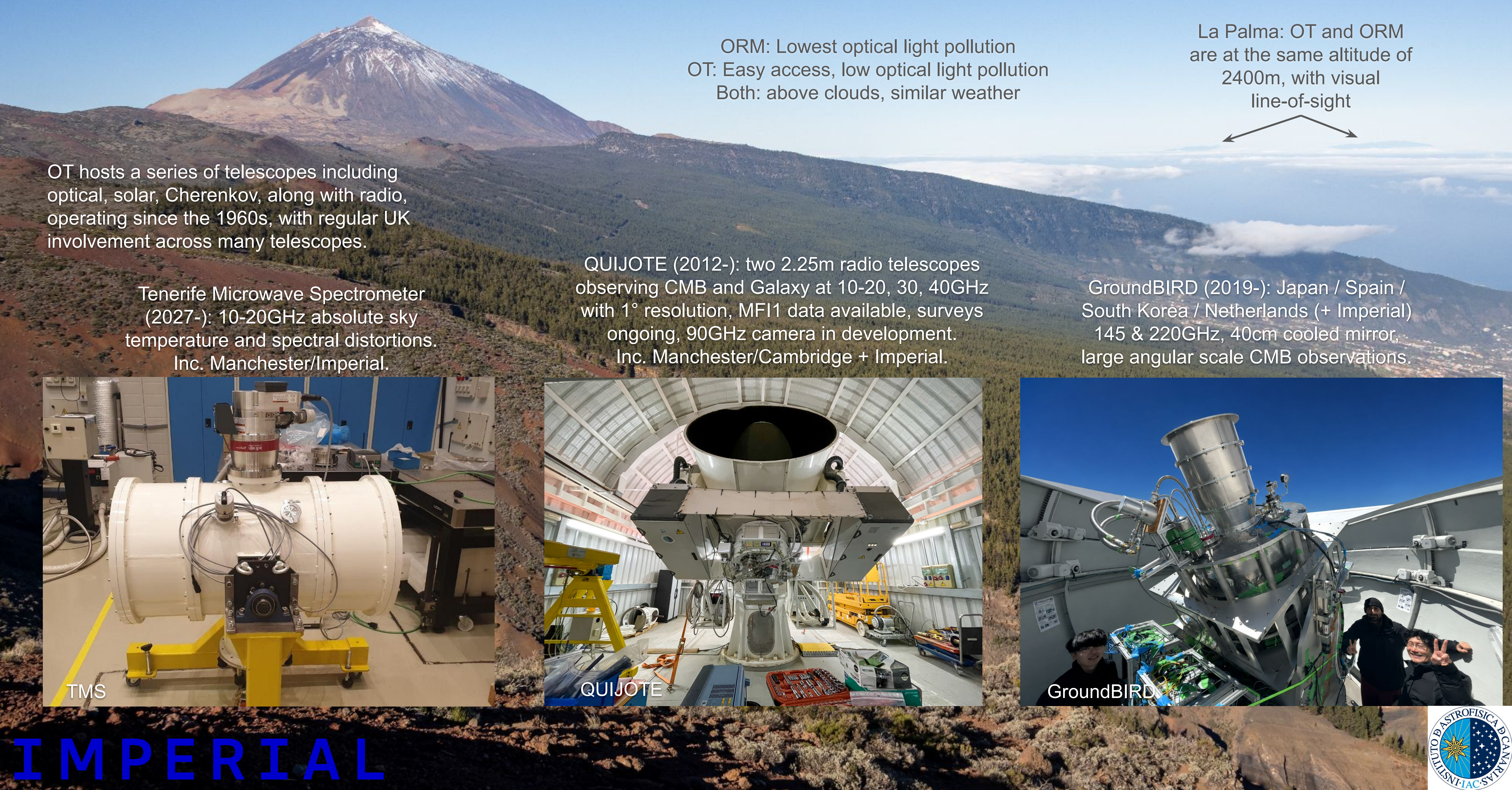


A dual-site perspective on UK astronomy in the Canary Islands: the role of Teide Observatory

Mike Peel (Imperial College London) - email@mikepeel.net

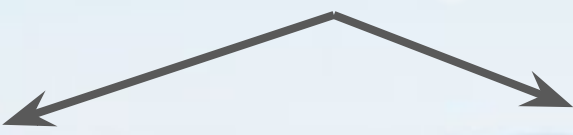
The Canary Islands host two of the best astronomical sites in the Northern Hemisphere, with the Observatorio del Roque de los Muchachos (ORM) and the Observatorio del Teide (OT) providing complementary observing capabilities from geographically proximate, high-altitude locations. Combined use of facilities on Tenerife and La Palma enhances the overall capability available to UK astronomers, particularly through multiwavelength coverage and shared access to world-class observing sites.

The QUIJOTE experiment provides wide-area surveys at 10–40 GHz, with recent data releases from its Multi-Frequency Instrument enabling studies of Galactic emission on large angular scales. This programme builds on a long heritage of radio and microwave experiments at Tenerife. Ongoing and upcoming experiments at CMBLab, including GroundBIRD, Tenerife Microwave Spectrometer, and LSPE-STRIP, will extend this to higher frequencies and improved sensitivity, through the CMB-Teide Collaboration.



ORM: Lowest optical light pollution
OT: Easy access, low optical light pollution
Both: above clouds, similar weather

La Palma: OT and ORM
are at the same altitude of
2400m, with visual
line-of-sight

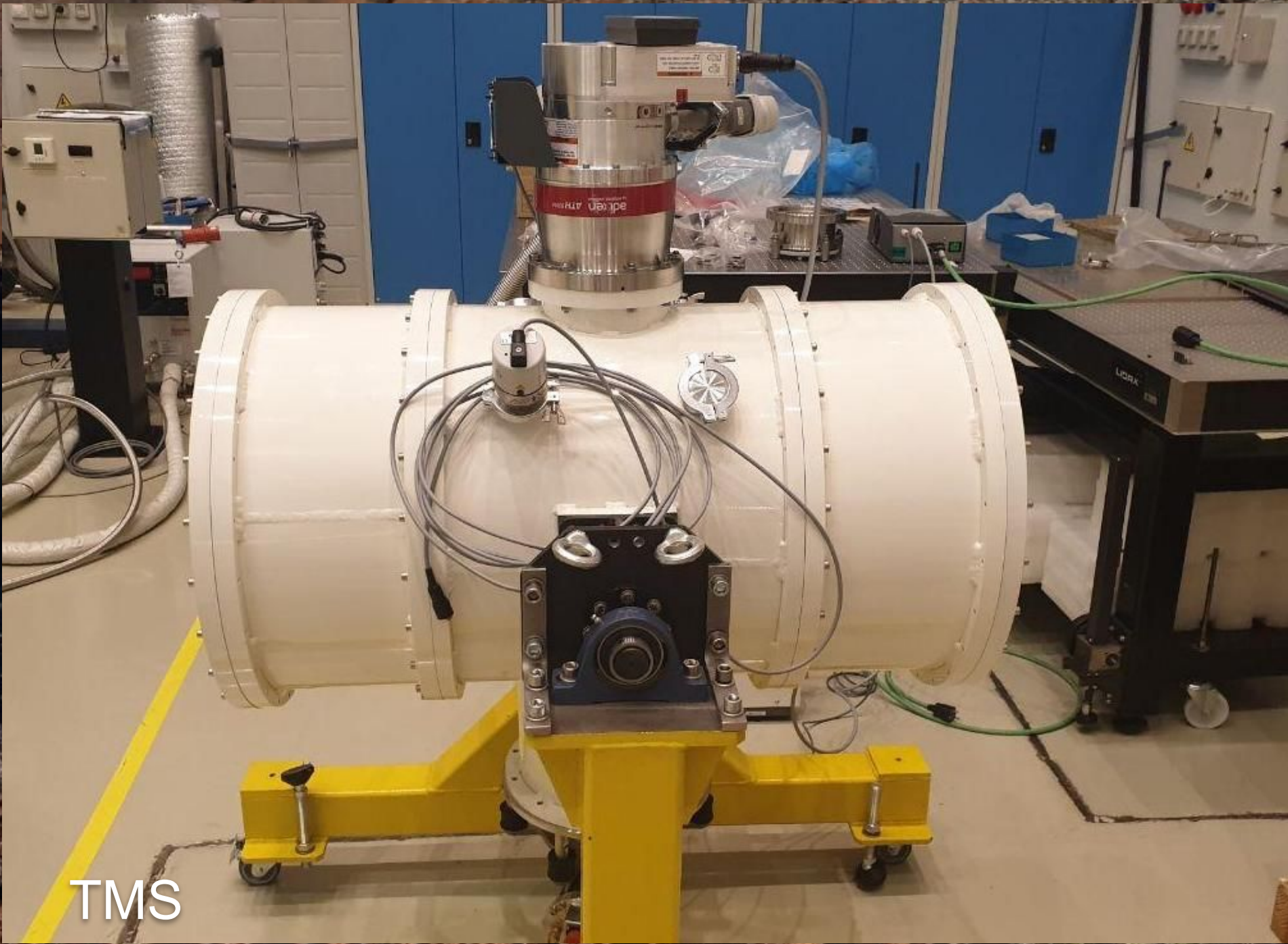


OT hosts a series of telescopes including optical, solar, Cherenkov, along with radio, operating since the 1960s, with regular UK involvement across many telescopes.

Tenerife Microwave Spectrometer
(2027-): 10-20GHz absolute sky
temperature and spectral distortions.
Inc. Manchester/Imperial.

QUIJOTE (2012-): two 2.25m radio telescopes
observing CMB and Galaxy at 10-20, 30, 40GHz
with 1° resolution, MFI1 data available, surveys
ongoing, 90GHz camera in development.
Inc. Manchester/Cambridge + Imperial.

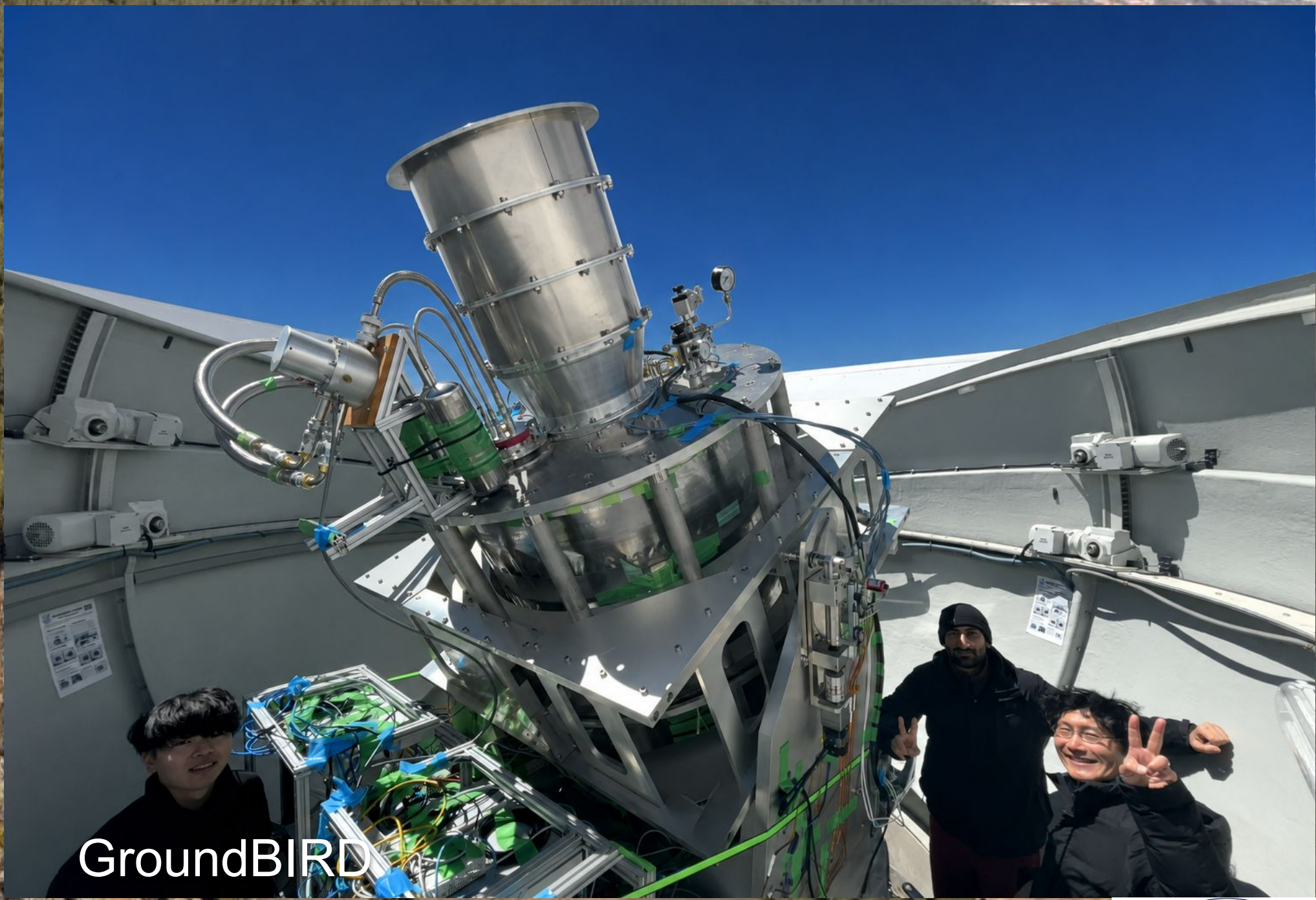
GroundBIRD (2019-): Japan / Spain /
South Korea / Netherlands (+ Imperial)
145 & 220GHz, 40cm cooled mirror,
large angular scale CMB observations.



TMS



QUIJOTE



GroundBIRD

IMPERIAL

