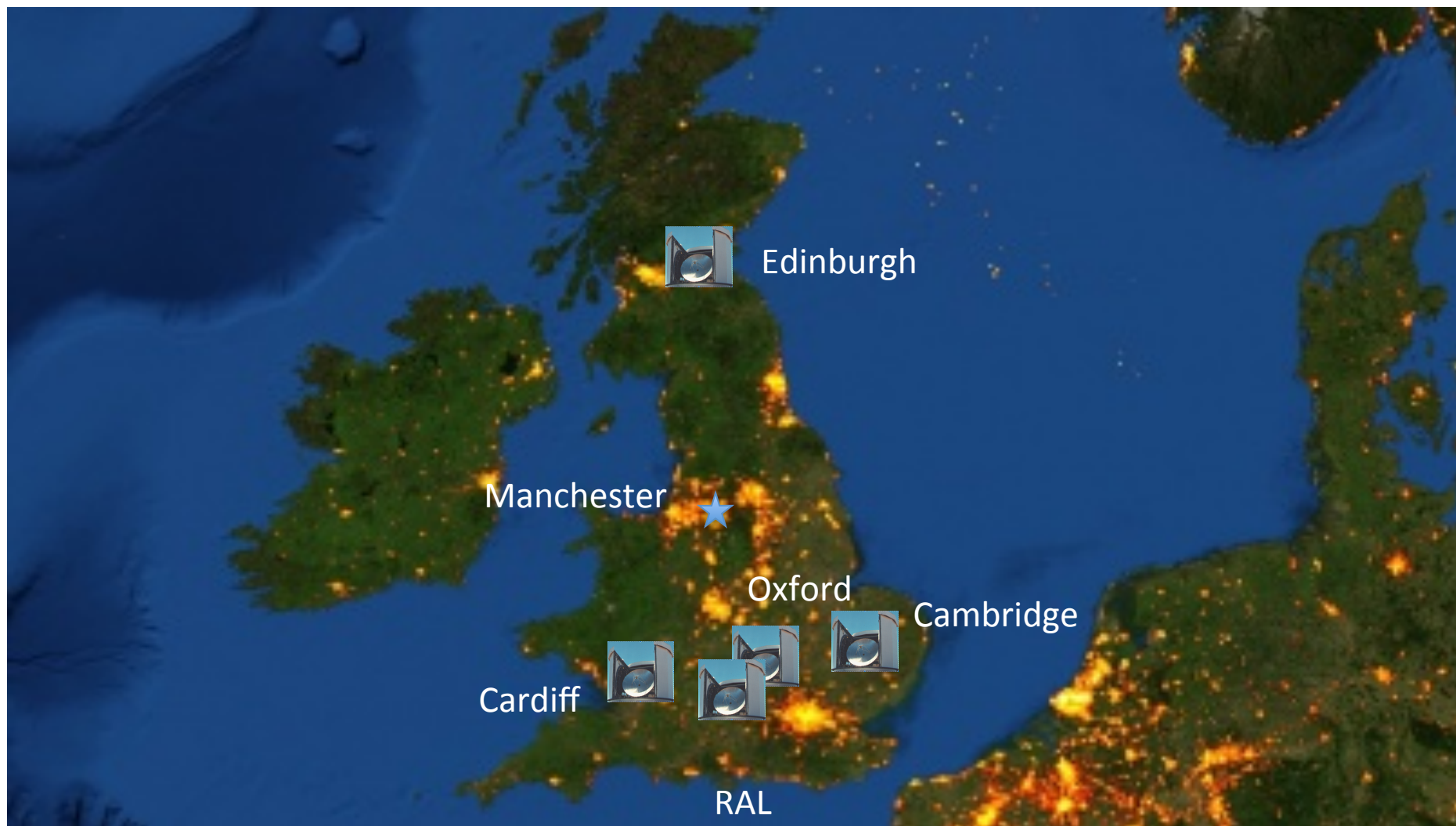


UK Instrumentation Groups

Gary Fuller

University of Manchester





Edinburgh

Manchester



Oxford

Cambridge

Cardiff



RAL

Instrumentation Groups in UK

- **RAL** *Ellison*
 - Full range of capabilities for mm/submm instrumentation development, strong interests in heterodyne instruments.
 - ALMA: cryogenics, photonic phase reference mixers, and calibration load
 - AMSTAR (Advanced Millimetre & Sub-millimetre Technology for Astronomical Research) Radionet - Design, construct and demonstrate a novel 2-3mm focal plane heterodyne array. Integration of a novel photomixing LO with SIS detector in a common waveguide embedding circuit.
- **Cardiff** *Pisano/Ade/Doyle/Gear*
 - Detectors (KIDs, TES), filters/quasi-optics
- **Oxford** *Jones/Leech/Taylor/Yassin/Rigopoulou*
 - Detectors, focal plane arrays
- **Cambridge** *Withington/Hills*
 - Detectors
- **Edinburgh**
- **Manchester** *George/Fuller*
 - LNAs

