



SUPA IAC Meeting – 11th May 2017

Theme: Astronomy & Space Physics

Theme Leader/speaker: Ken Rice (Edinburgh, Institute for Astronomy))

Edinburgh (IfA + UKATC)

St Andrews (Astronomy + Solar Physics)

Glasgow (IGR + Astronomy & Astrophysics Group)

Dundee (Astronomy + Solar Physics)

~ 50 Academic staff

> 60 PDRAs and Research Fellows

~ 100 PhD students

Funding: Mainly STFC, but a lot of ERC success, some Leverhulme.



Current Scope of Theme

Edinburgh

Exoplanets, Star and planet formation,
Stellar populations, galaxy dynamics,
Galaxy formation & evolution, AGN, high-redshift
galaxies, Cosmology

Glasgow

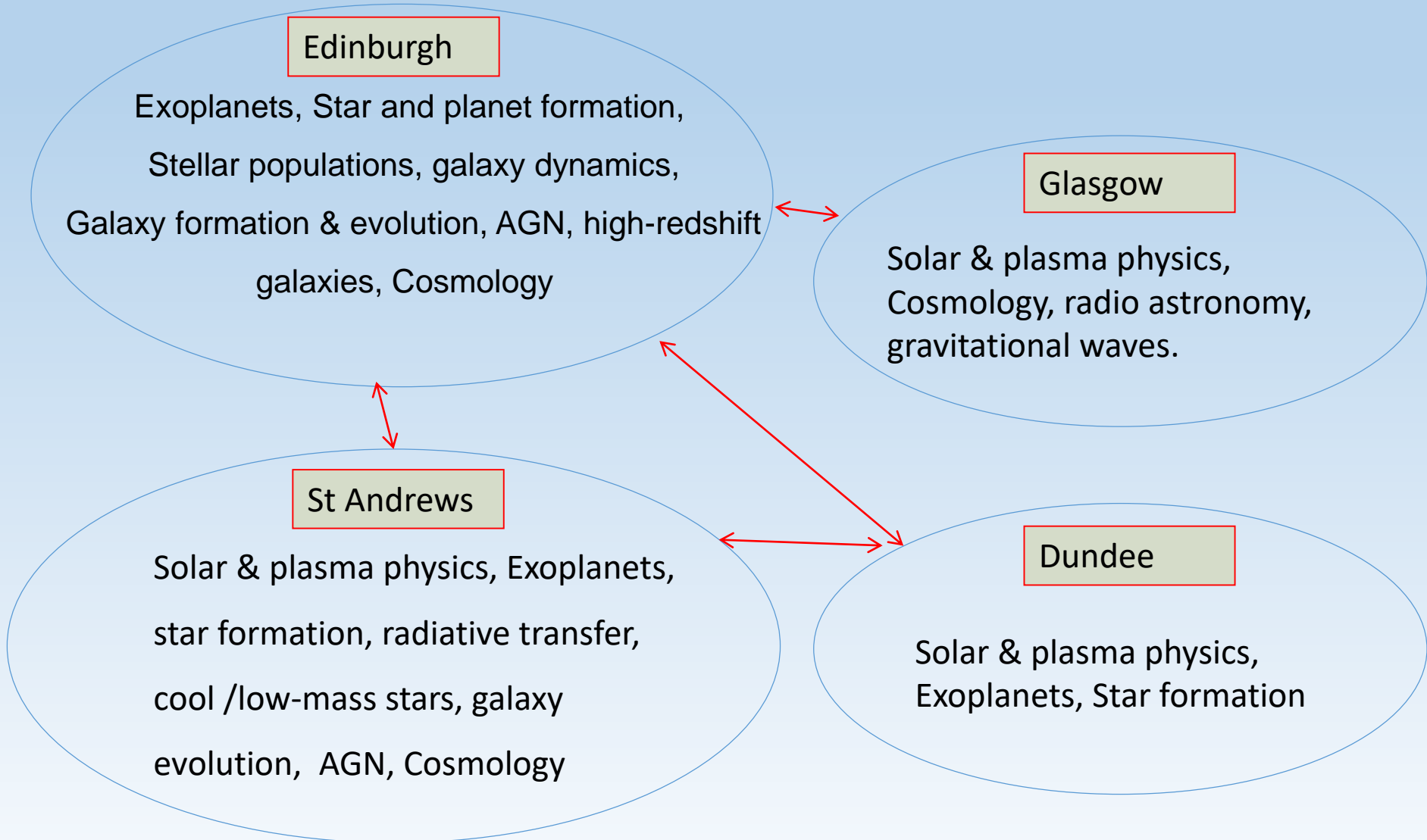
Solar & plasma physics,
Cosmology, radio astronomy,
gravitational waves.

St Andrews

Solar & plasma physics, Exoplanets,
star formation, radiative transfer,
cool /low-mass stars, galaxy
evolution, AGN, Cosmology

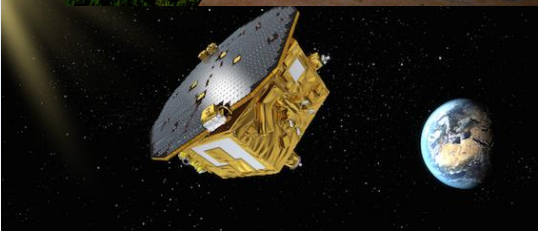
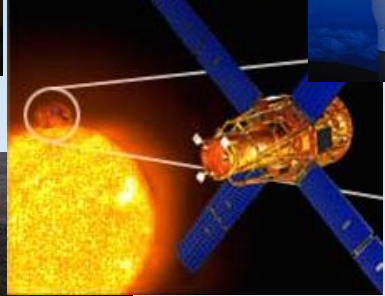
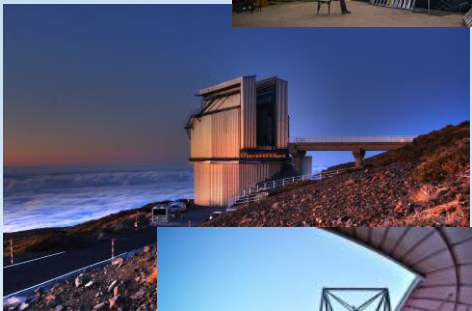
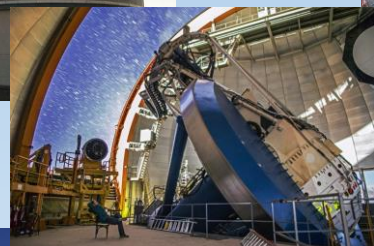
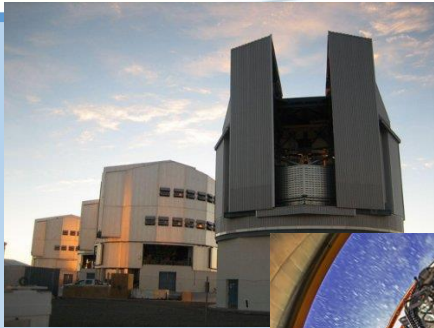
Dundee

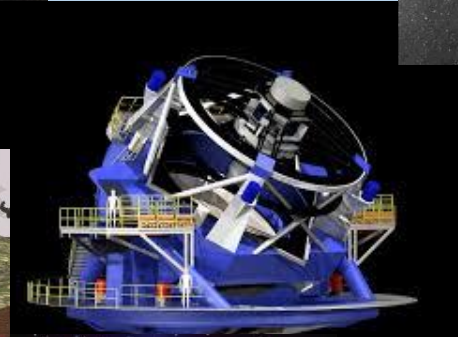
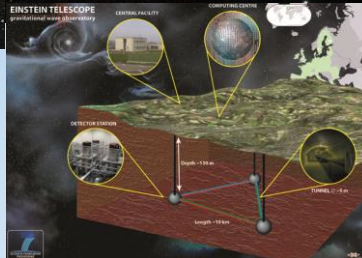
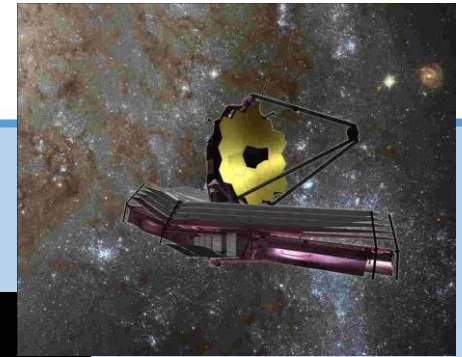
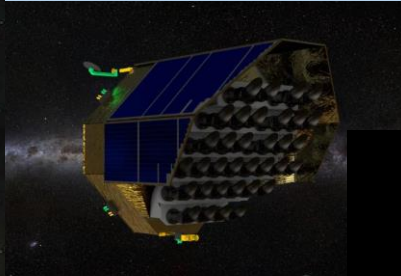
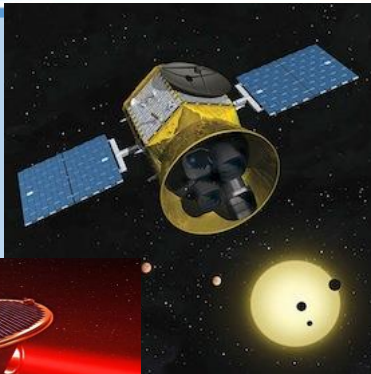
Solar & plasma physics,
Exoplanets, Star formation



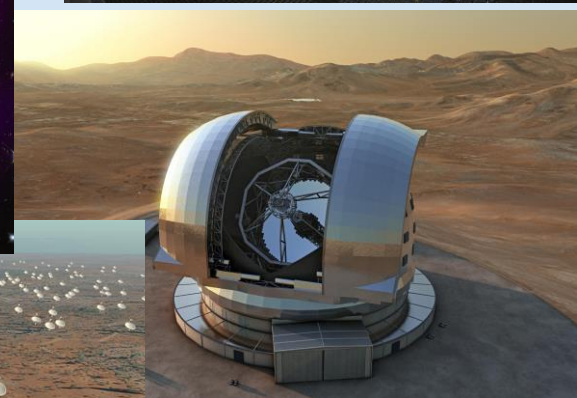


What we do now





- WFAU
 - ✧ EUCLID/LSST
- UKATC
 - ✧ SKA (operations)
 - ✧ MOONS, ERIS (VLT).
 - ✧ HARMONI, METIS (E-ELT).
- Centre for Exoplanet Science
 - ✧ Edinburgh, St Andrews
 - ✧ Joint funding bids, projects,...





- Centre for Doctoral Training in Data Intensive Science
 - ✧ Edinburgh, St Andrews, Glasgow
 - ✧ Funding for 16 students starting in September 2017
 - ✧ Training courses + 6 month industrial placements.
 - ✧ Proposal for a longer-term programme being submitted later this year.



Higgs Centre for Innovation

- **Start-up incubator to house 12 small companies.**
- **Clean room, Shaker table, Cryo-vacuum testing, Optical & IR benches.**
- **3 x Nano-sat functional testing kit, Optical simulation for Earth-obs, RF Comm testing**

- Vibrant, active community engaged in many exciting and world-leading research programmes/projects
- Already active in many of the future major astronomy and space science projects
 - ✧ Scientifically (JWST, EUCLID, LSST, TESS, LISA, EINSTEIN TELESCOPE,....)
 - ✧ Data management (EUCLID, LSST,)
 - ✧ Instrumentation development (VLT, E-ELT, JWST, LISA, EINSTEIN TELESCOPE,....)
- Considerable impact and spin-off opportunities
 - ✧ Blackford Analysis, Higgs Centre for Innovation, gravitational wave detector technology, Centre for Doctoral Training in Data Intensive Science,

Things to continue thinking about:

- Funding for International/EU PhD students
- Environment
 - ✧ Maintaining critical mass in key areas and providing the right environment to prosper.