



**SUPA IAC Meeting – 26<sup>th</sup> May 2016**  
*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)

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

## Edinburgh

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

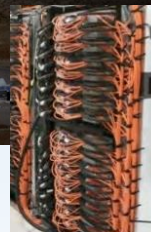
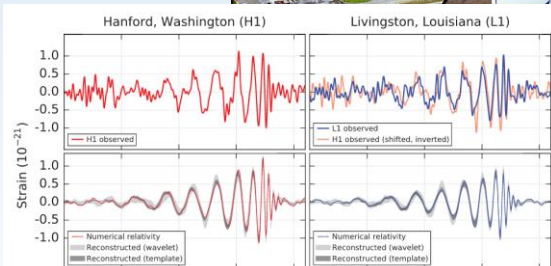
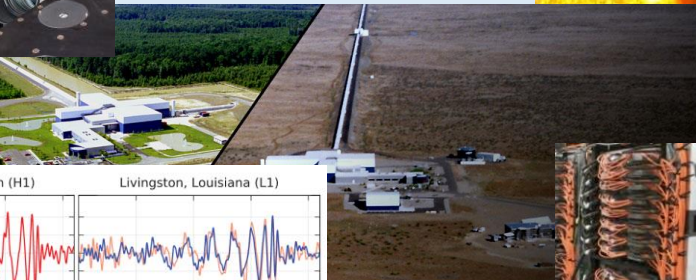
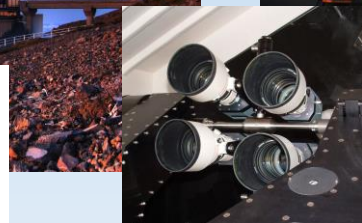
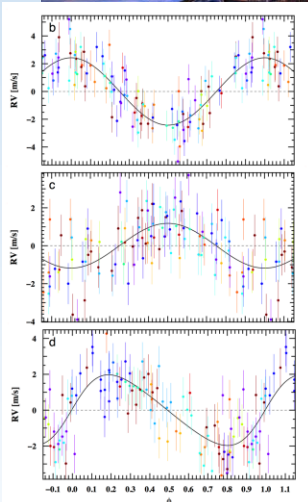
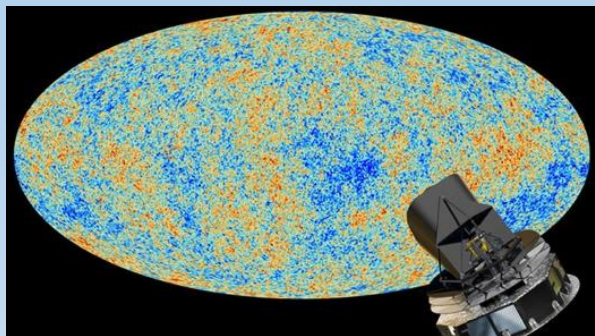
## Glasgow

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









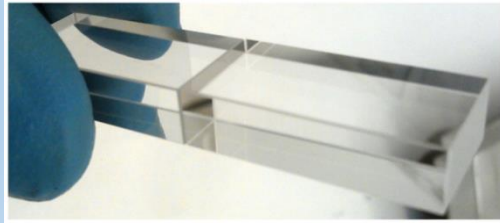
➤ Big data

- ✧ WFAU
- ✧ EUCLID/LSST/SKA

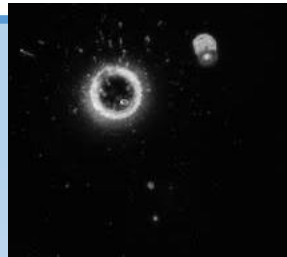
➤ High-performance computing

- ✧ Relevance for theory and observation (EUCLID).
- ✧ Are these resources being provided and used effectively.

# Impacts & spin offs



• High precision/stability bonding



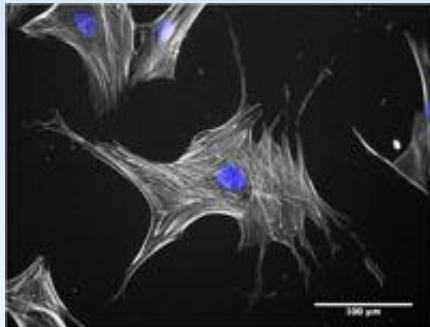
• Coating damage



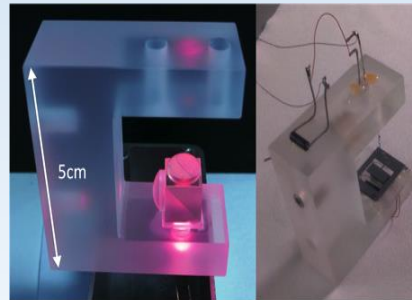
**Blackford**  
analysis



Higgs Centre for Innovation



• Stem cell differentiation



• Gravity sensors for environmental monitoring/security/oil &

- **Business Incubation Centre**
  - ✧ remote-sensing / space-hardware/ Big Data.
- A formal **connection with the Satellite Applications Catapult Centre (Harwell)**
- Dedicated **lab / clean-room test facilities**
- **Data visualisation suite**



# Concluding Remarks

- 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
  - ✧ Both scientifically and technically (instrumentation, detector development, data management,.....)
- Considerable impact and spin-off opportunities
  - ✧ Blackford Analysis, Higgs Centre for Innovation, gravitational wave detector technology
  - ....

Things to think about:

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