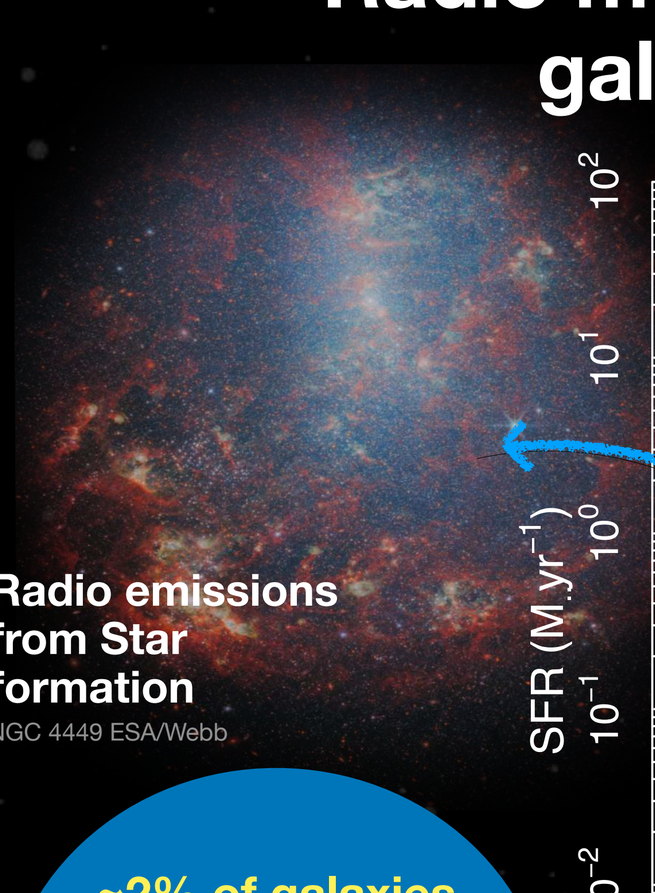
N R Kavin Kumar* Adam Marshall Ajay Dev Simon Driver Luke Davies Aaron Robotham

STARS OR AGN?

*Email: kavin.kumar@icrar.org

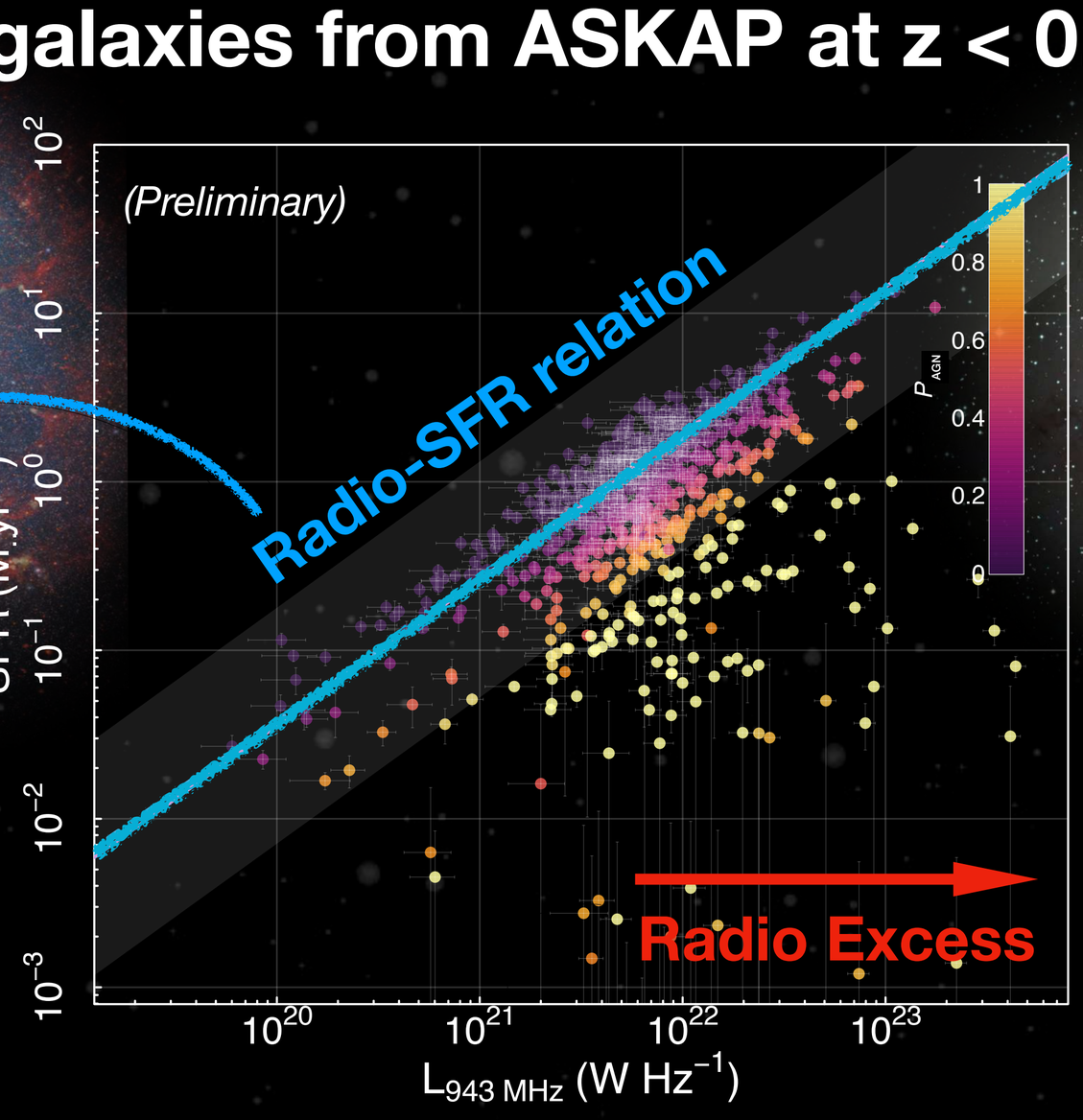
In UV–IR, a faint AGN is easily lost in the host galaxy's starlight and dust. X-rays and radio pick out AGN that SED fitting alone misses.

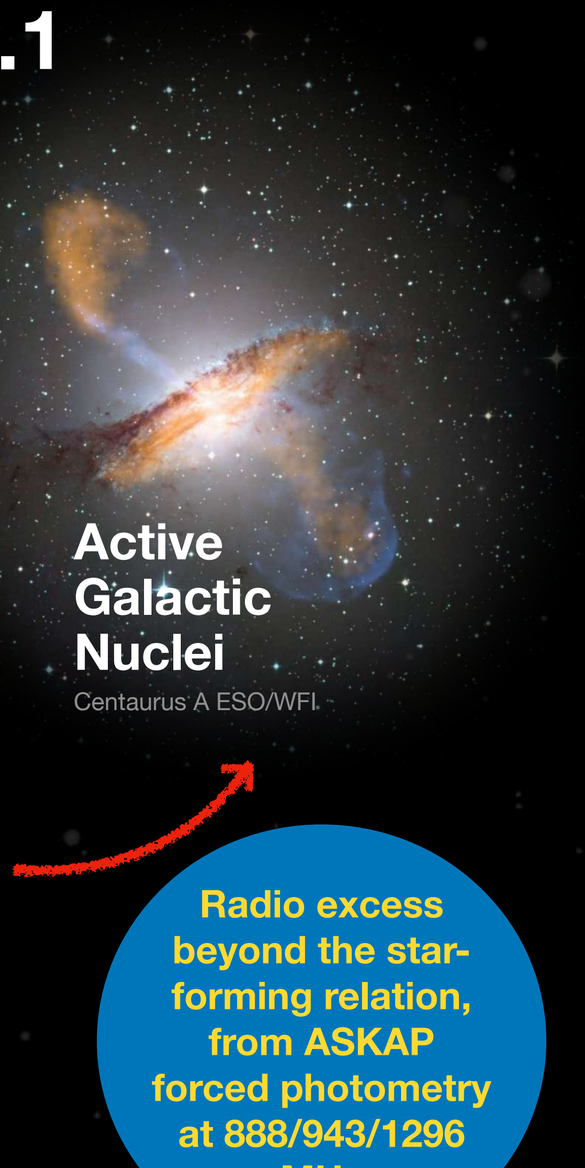
Radio measurements for 5258 GAMA-G09 galaxies from ASKAP at z < 0.1



Radio emissions from Star formation

NGC 4449 ESA/Webb





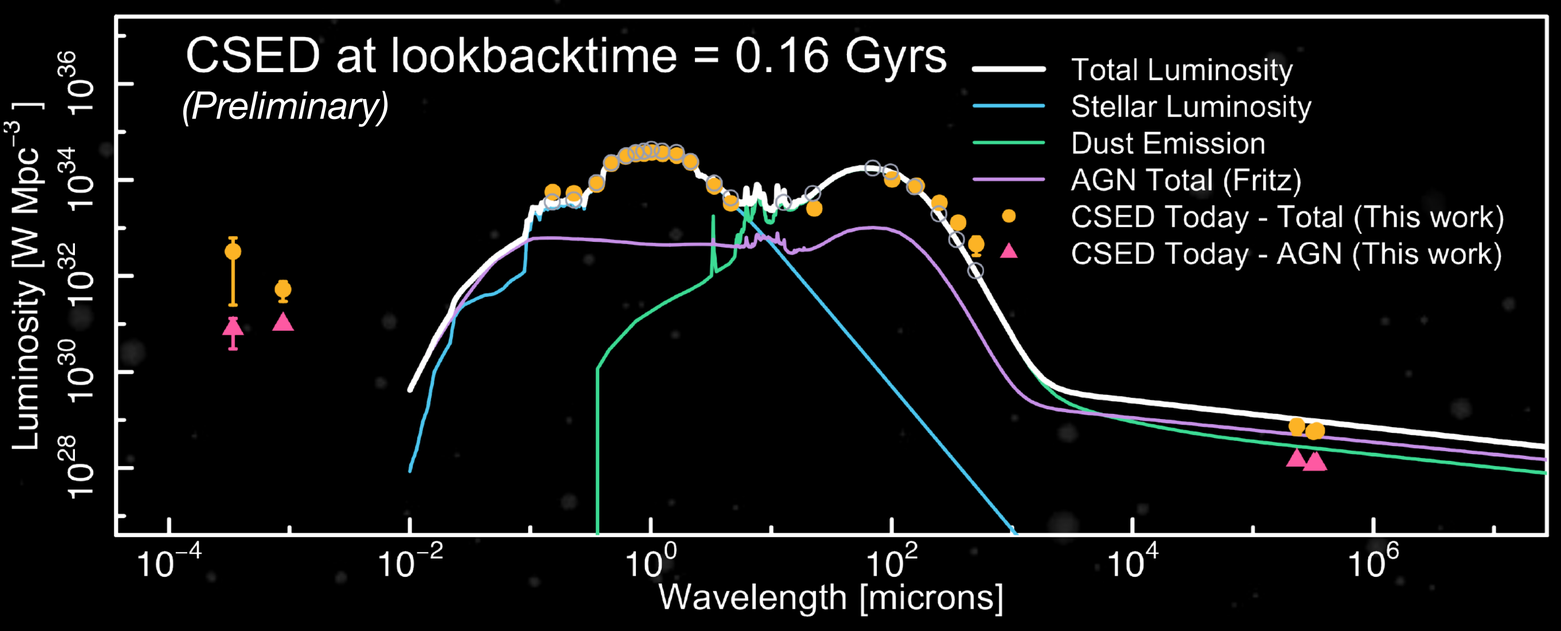
Active Galactic Nuclei

Centaurus A ESO/WFI

~2% of galaxies show radio excess.. and they're mostly *not* the AGN X-rays or optical lines find

Radio excess beyond the star-forming relation, from ASKAP forced photometry at 888/943/1296 MHz

What fraction of the energy density in the local universe (z < 0.1) is from AGN?



3-20%
X-Ray AGN contribution

17-20%
Radio AGN contribution

We find that no one single band or technique can identify all AGN present in the region

GAMA eROSITA ICRAR International Centre for Radio Astronomy Research ProSpect EMU Evolutionary Map of the Universe