Simulated Imaging of CO in SMGs

Moment 0 map of simulation:
CO(1-0) in a z=4.37 SMG

Moment 0 map of
SIMOBSERVE output

SFR = 415 M$_\odot$/yr

50 kpc
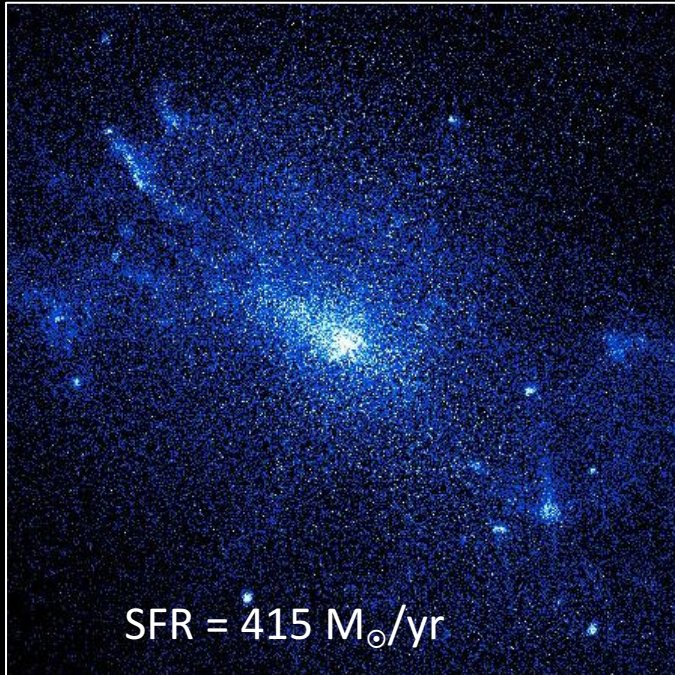
Run through SIMOBSERVE using
292 18-m dishes for a 2 hour
integration, resulting in ~10 μJy
channel rms
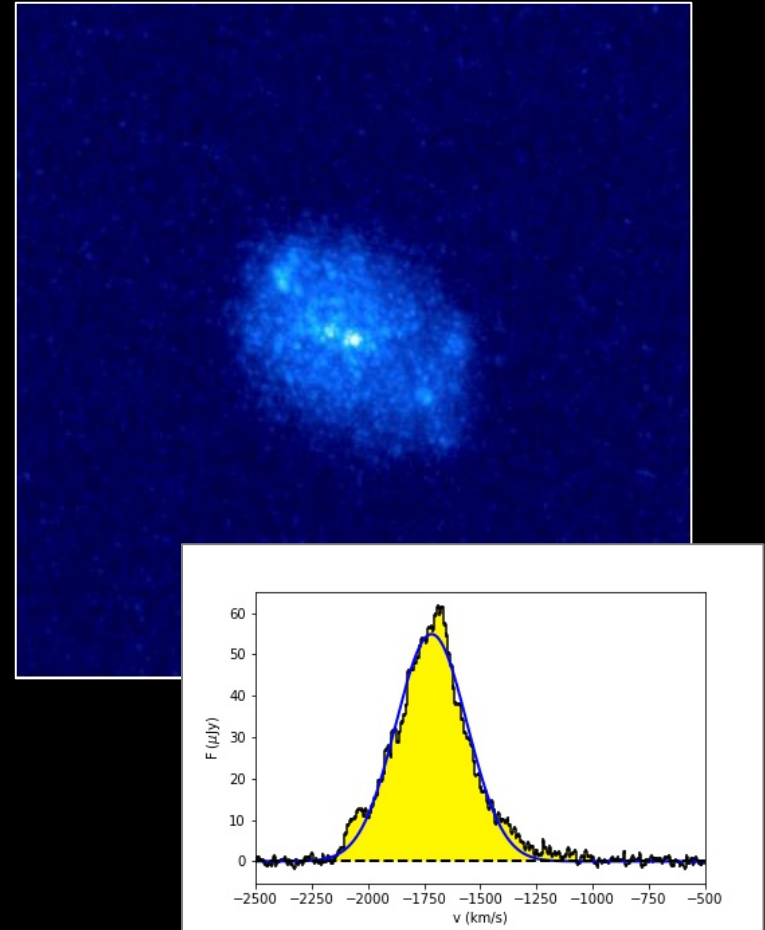
See poster for results on gas
mass, CO line luminosity, &
gas depletion timescales

Jackie Champagne 28 June 2017