

A composite astronomical image of a galaxy, likely the Whirlpool Galaxy (M51), showing a mix of blue and red emission regions. The blue regions indicate ionized hydrogen (H II) and the red regions indicate ionized sulfur (S II). The galaxy's spiral structure is visible, with a bright yellowish-white core. The background is dark with scattered stars.

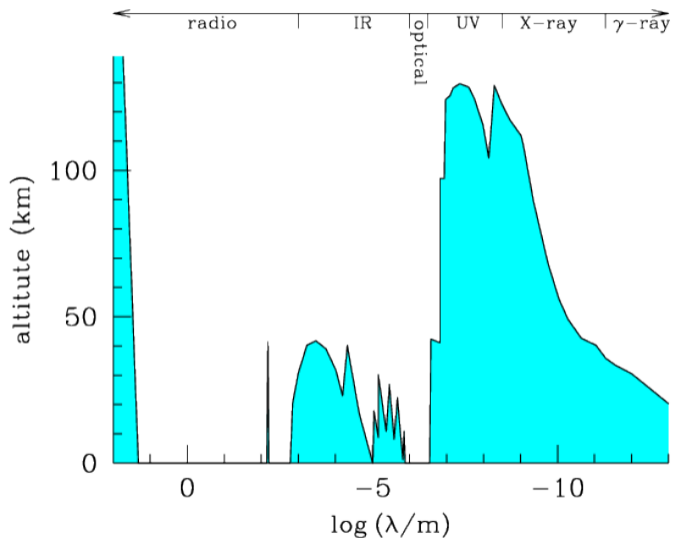
Astronomical observations

Fluxes and magnitudes & Spectroscopy

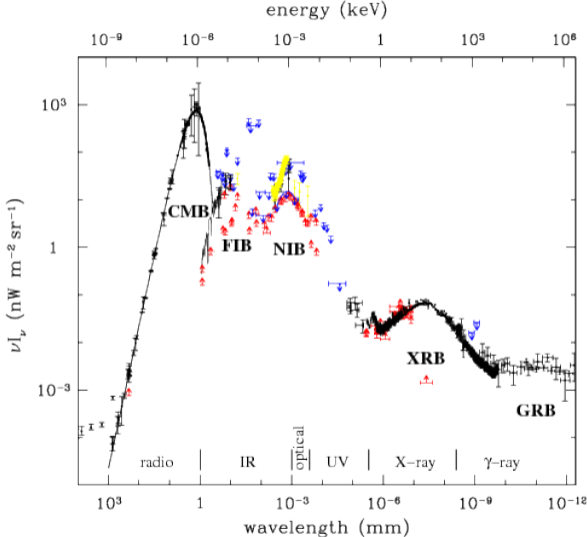
September 1, 2022

University of Rochester

Optical depth in Earth's atmosphere



Cosmological background radiation



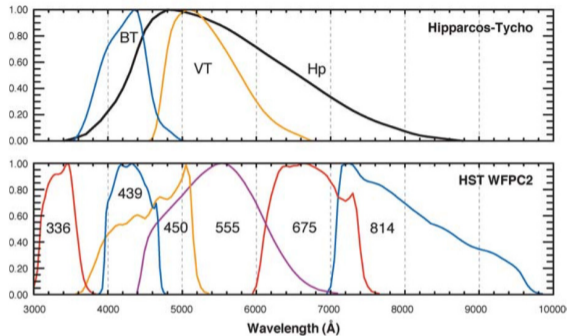
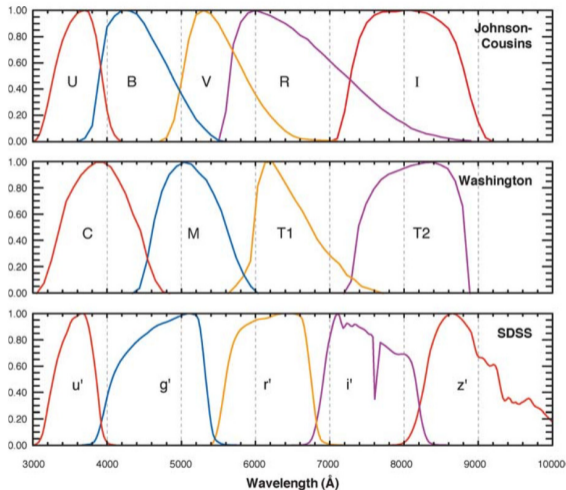
Photometry

M 88, Mees Observatory, ASTR 142, Spring 2018

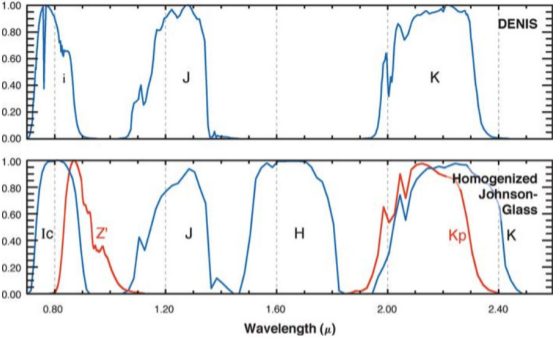
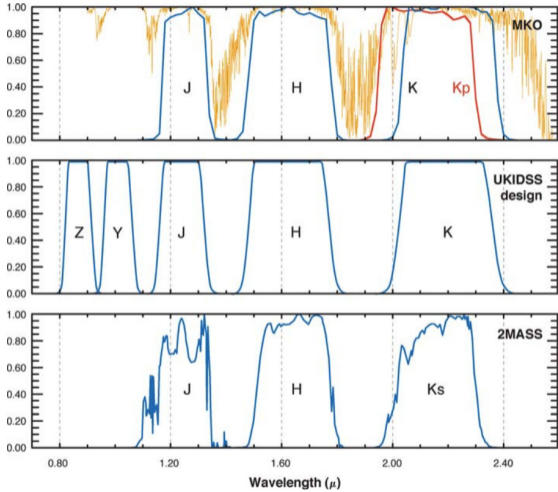


Various broad-band photometric systems

See Bessell (2005) for summary of the many systems

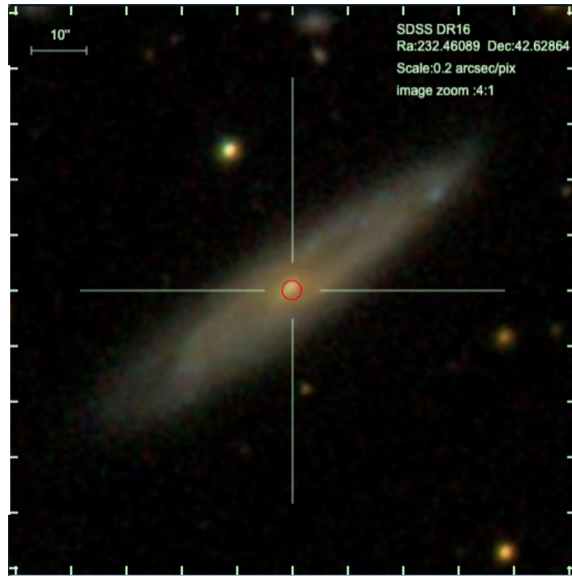
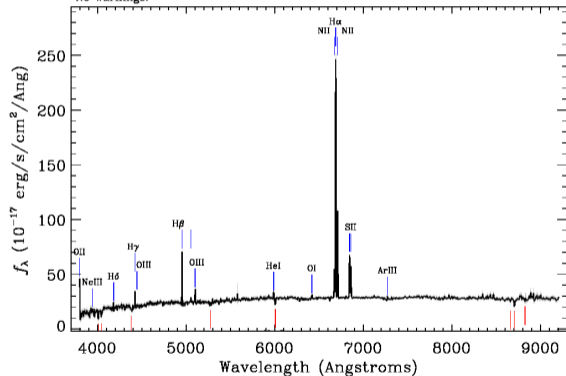


Various narrow-band photometric filters

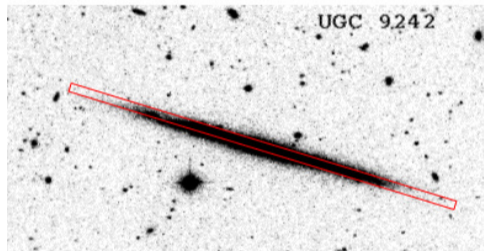


Fiber spectroscopy

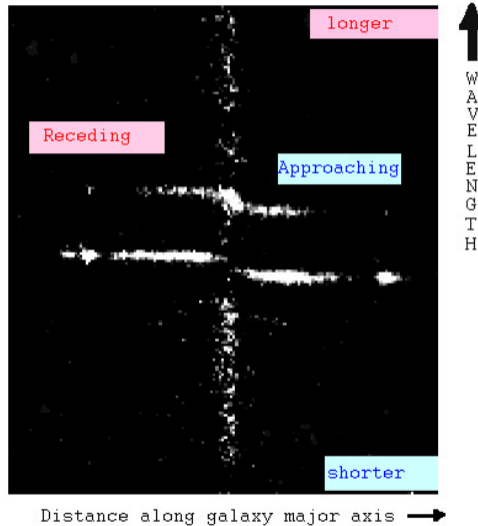
Survey: *sdss* Program: *legacy* Target: *GALAXY_RED GALAXY*
RA=232.46105, Dec=42.62893, Plate=1679, Fiber=404, MJD=53149
 $z=0.01874 \pm 0.00001$ Class=GALAXY STARBURST
No warnings.



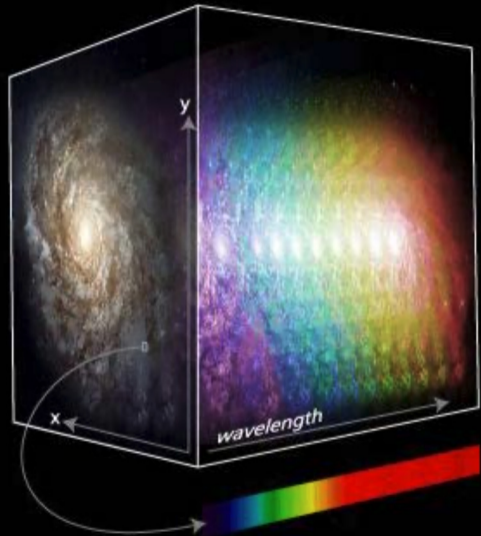
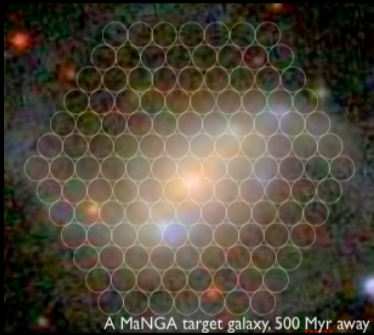
Long-slit spectroscopy



Galaxy rotation curve



IFU spectroscopy



Spectral kinematics

