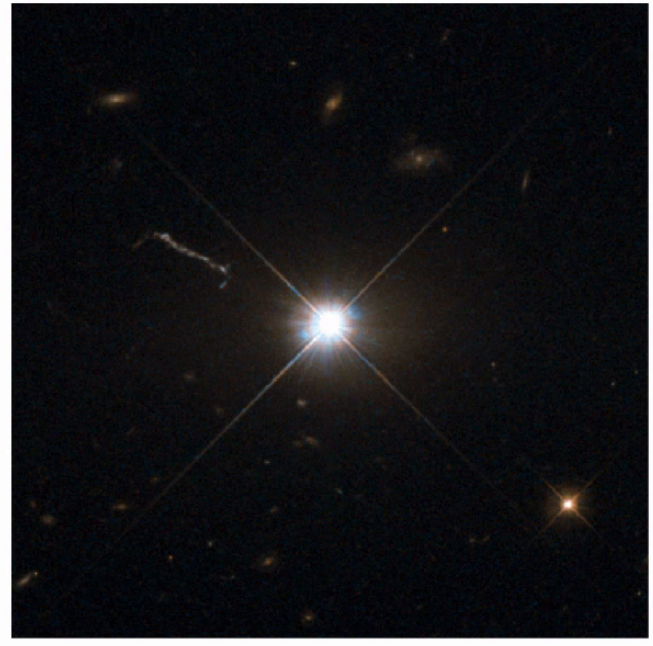


Quasars

1

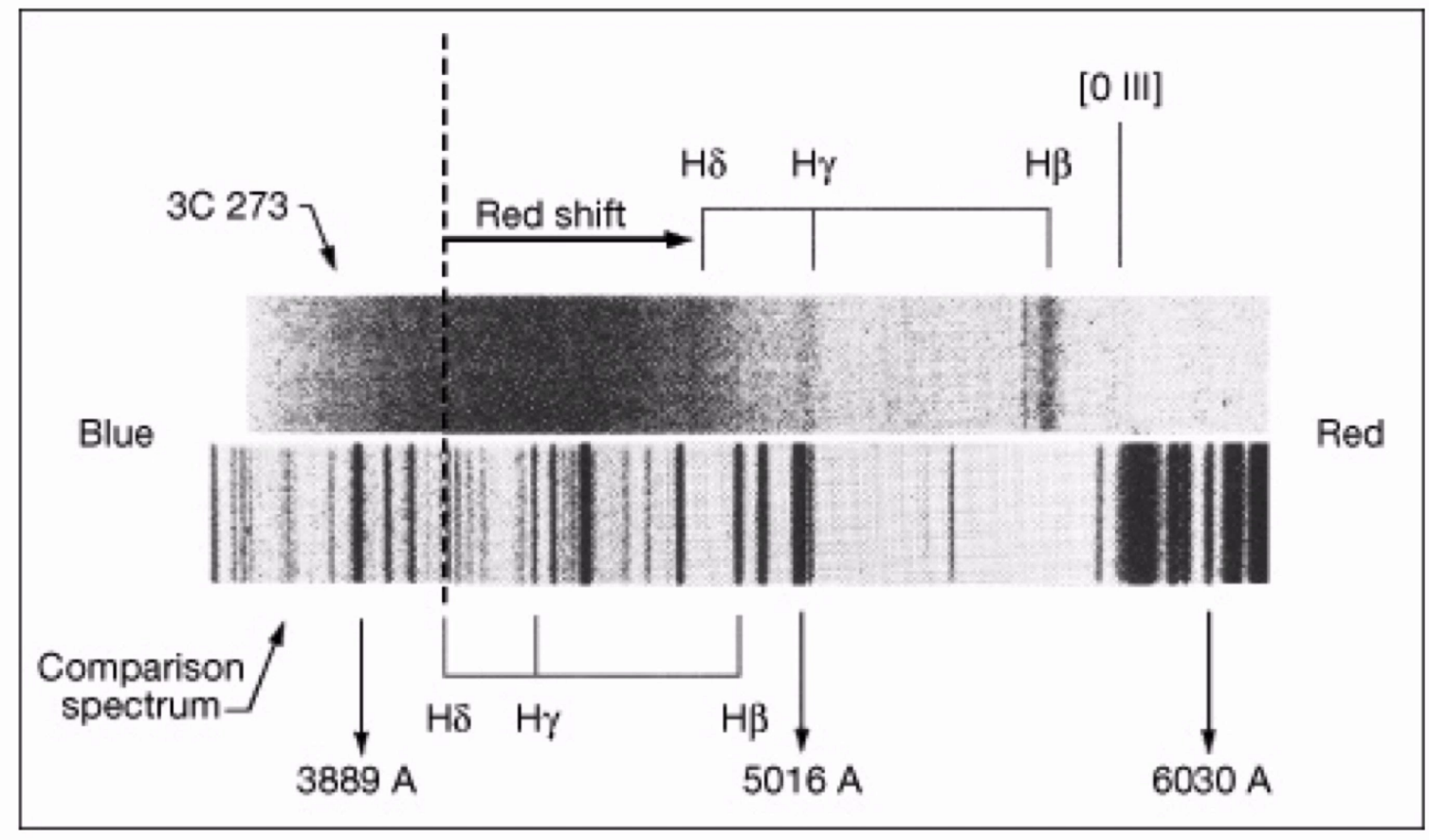
Quasars were first discovered as strong radio sources that in visible light appear as faint blue “stars”



The quasar 3C 273

2

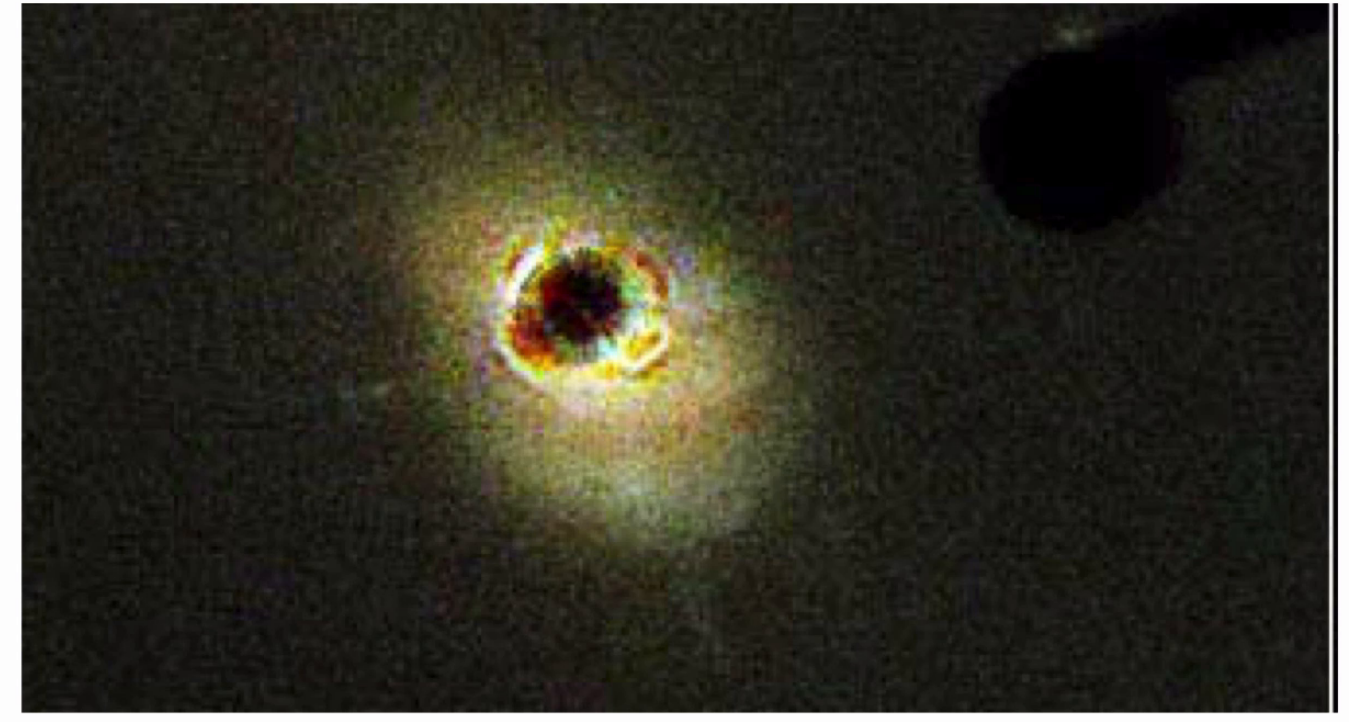
The spectrum of quasars reveals strong hydrogen lines with a huge redshift



Redshift of 3C 273 : 45,000 km/s

3

Observations using the Hubble Space Telescope reveal that quasars are embedded in host galaxies that obey the Hubble law, and are extremely distant



Host galaxy of 3C 273

4

Variability on short timescales (months) implies quasars cannot be larger than a few light months in size

