

# Overview of the Milky Way Galaxy

Luminous (stellar) Mass:

$$3 \times 10^{10} M_{\text{sun}}$$

Dynamical Mass (total)

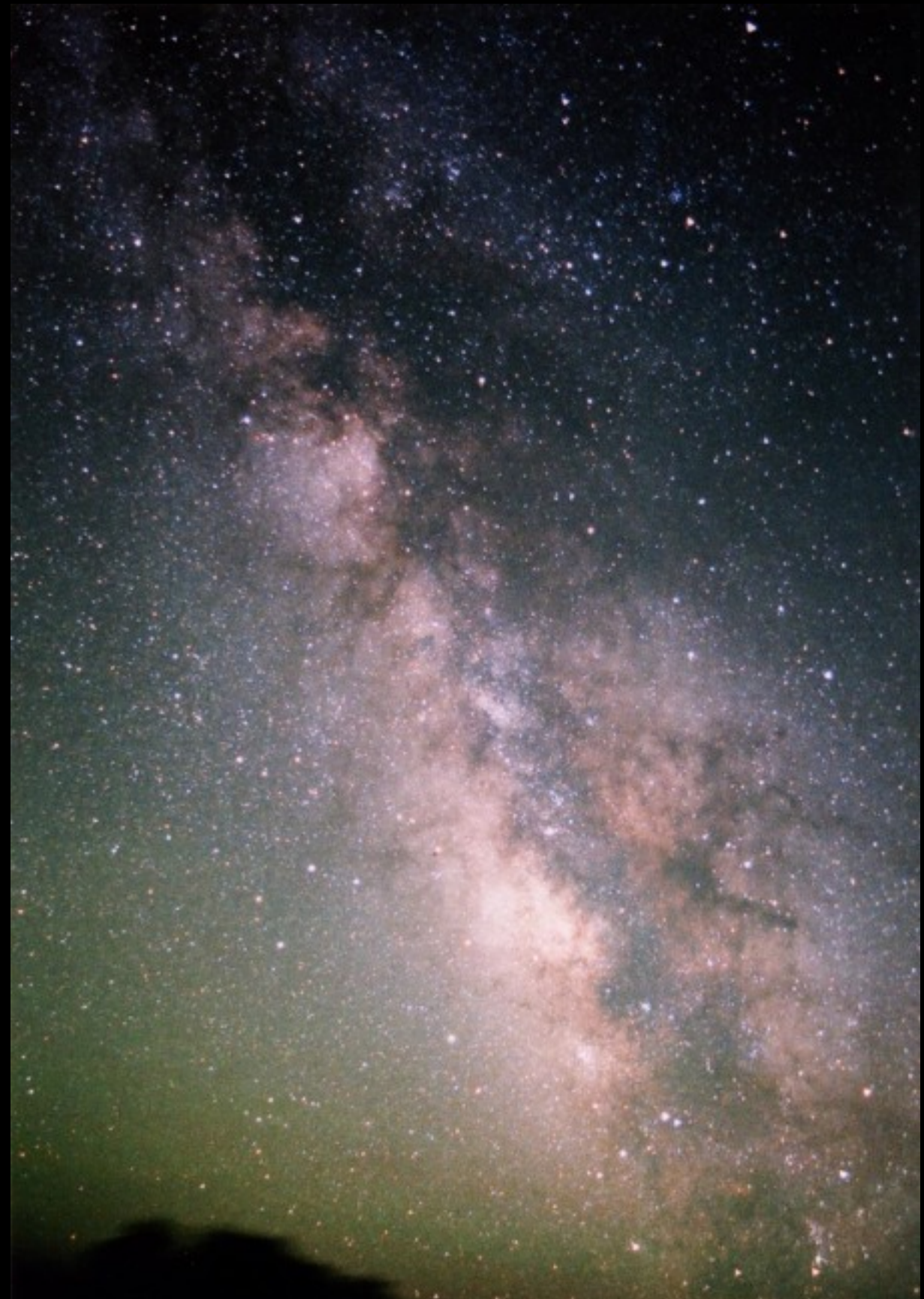
$$2 \times 10^{12} M_{\text{sun}}$$

Number of Stars:

$$\sim 10^{11} \text{ stars } (\langle m \rangle = 0.3 M_{\text{sun}})$$

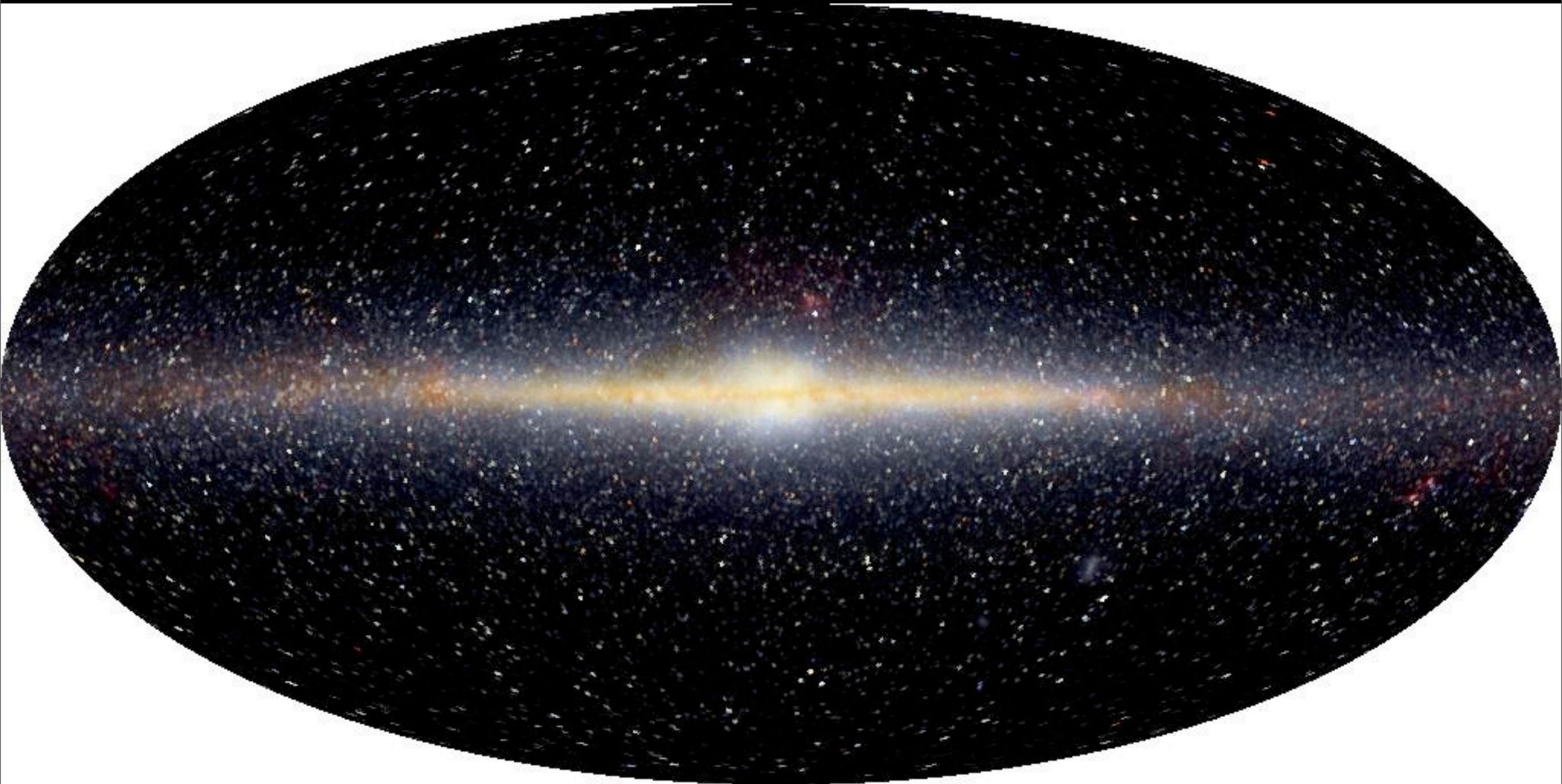
Galaxy Type:

Spiral (Sbc)





# Milky Way (infrared image)

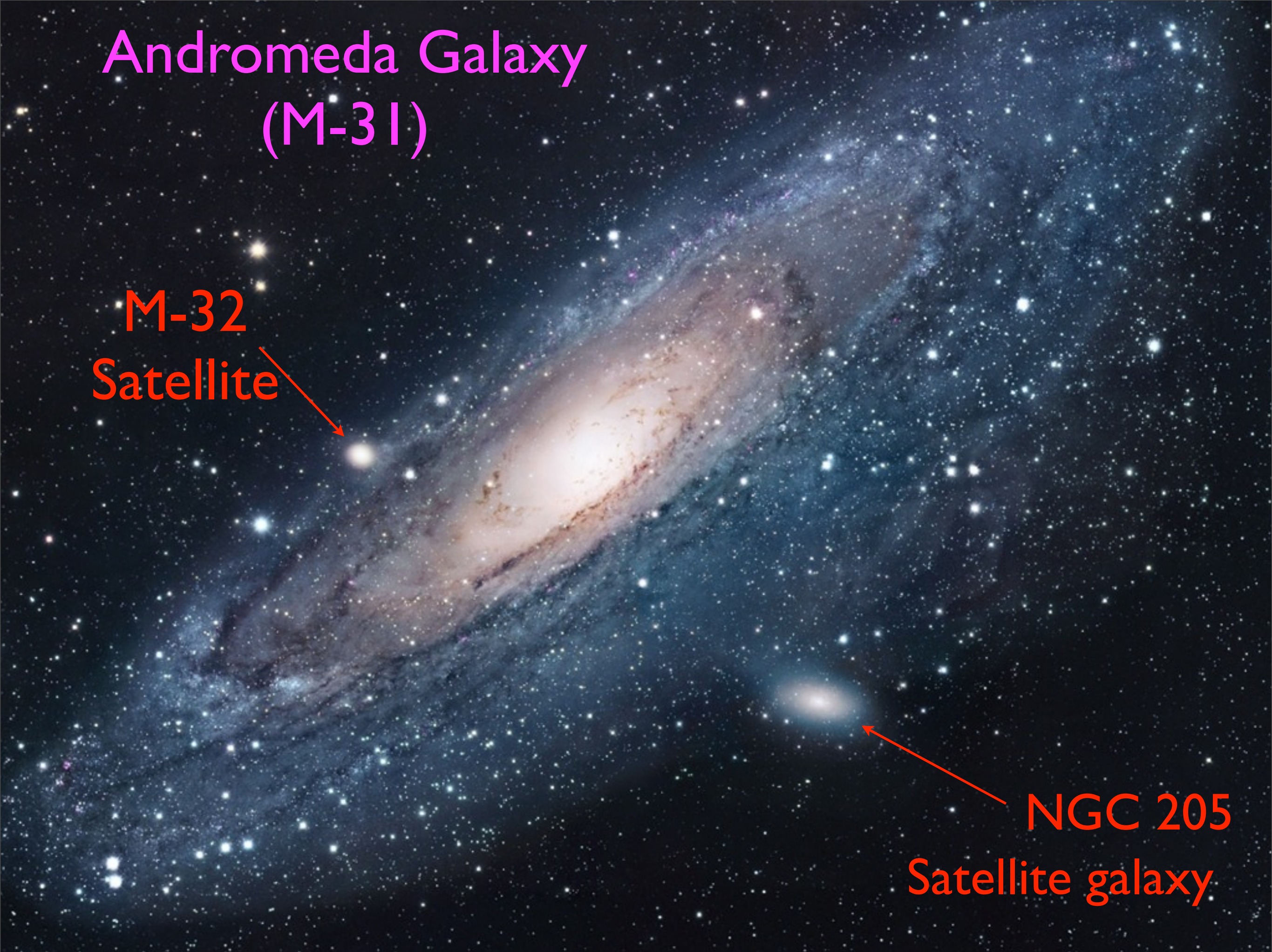




# Andromeda Galaxy (M-31)

M-32  
Satellite

NGC 205  
Satellite galaxy









# M-104 (spiral with prominent bulge)

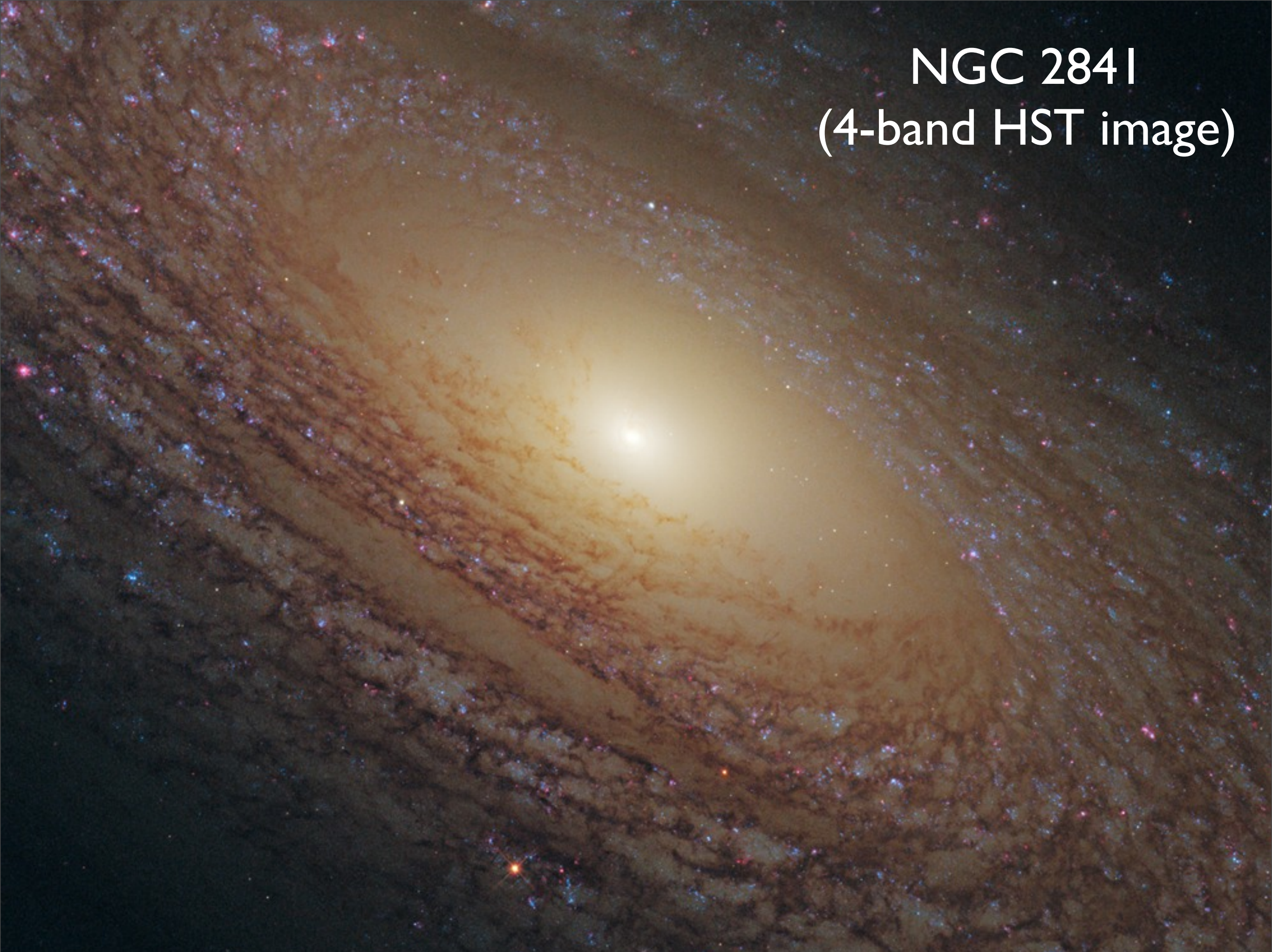


Photo: Russell Croman



# NGC 284I

(4-band HST image)

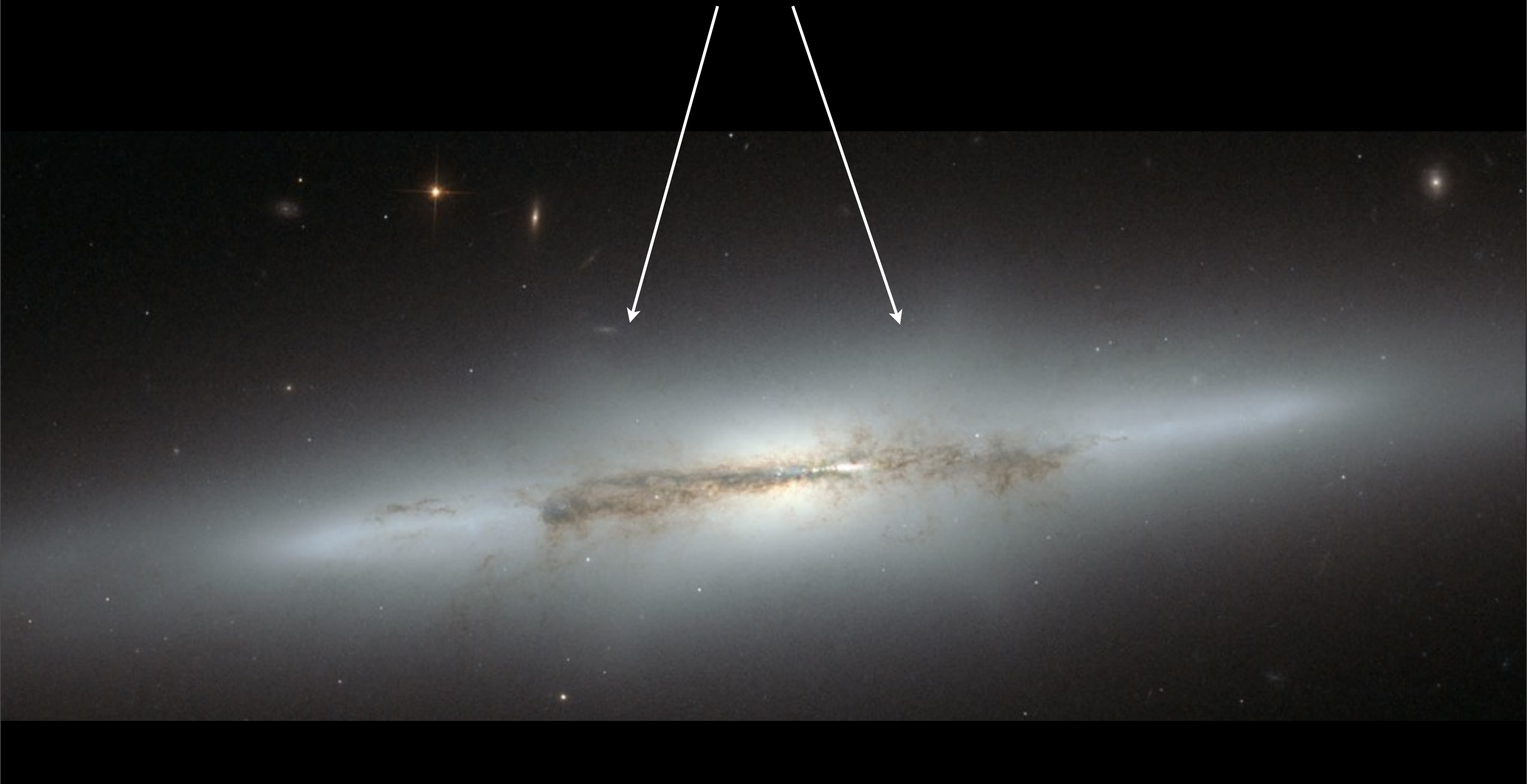




# NGC 4710

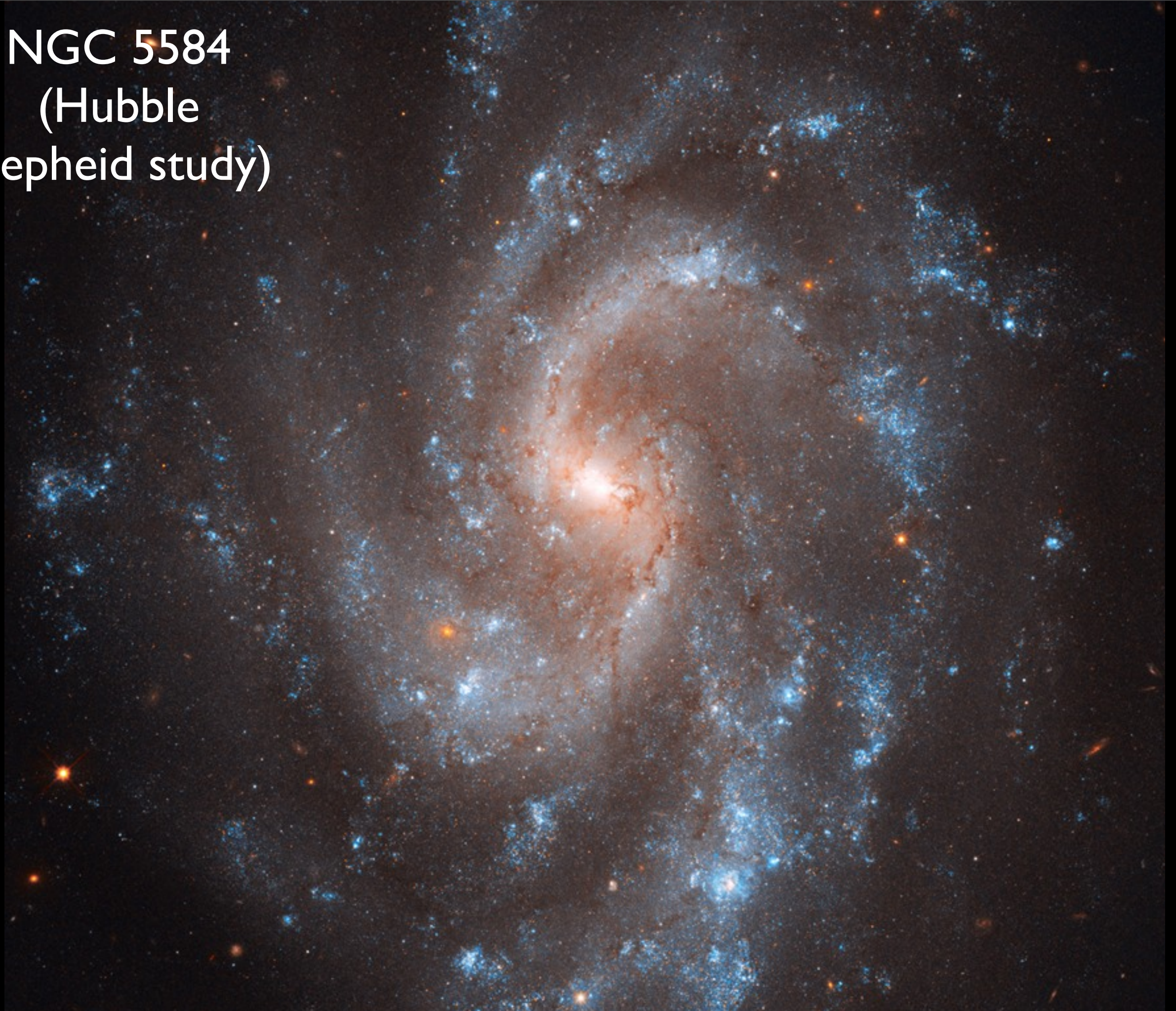
(note box orbits in bulge)

Envelope of “box orbits” appears as X-shape





NGC 5584  
(Hubble  
Cepheid study)





# Another Spiral Galaxy





# Edge-on Spiral (NGC 4013)





# Barred Spiral (Hubble image)





# NGC 1365

(largest barred spiral)



200,000 light yrs across  
(taken by ESA/La Silla  
1.5m telescope)



IC-10 (dwarf  
galaxy)

$D \approx 500\text{-}700 \text{ kpc}$



OMASS

Two Micron All Sky Survey



# Leo I Dwarf





# Sagittarius Dwarf

