

# Astro I: Introductory Astronomy



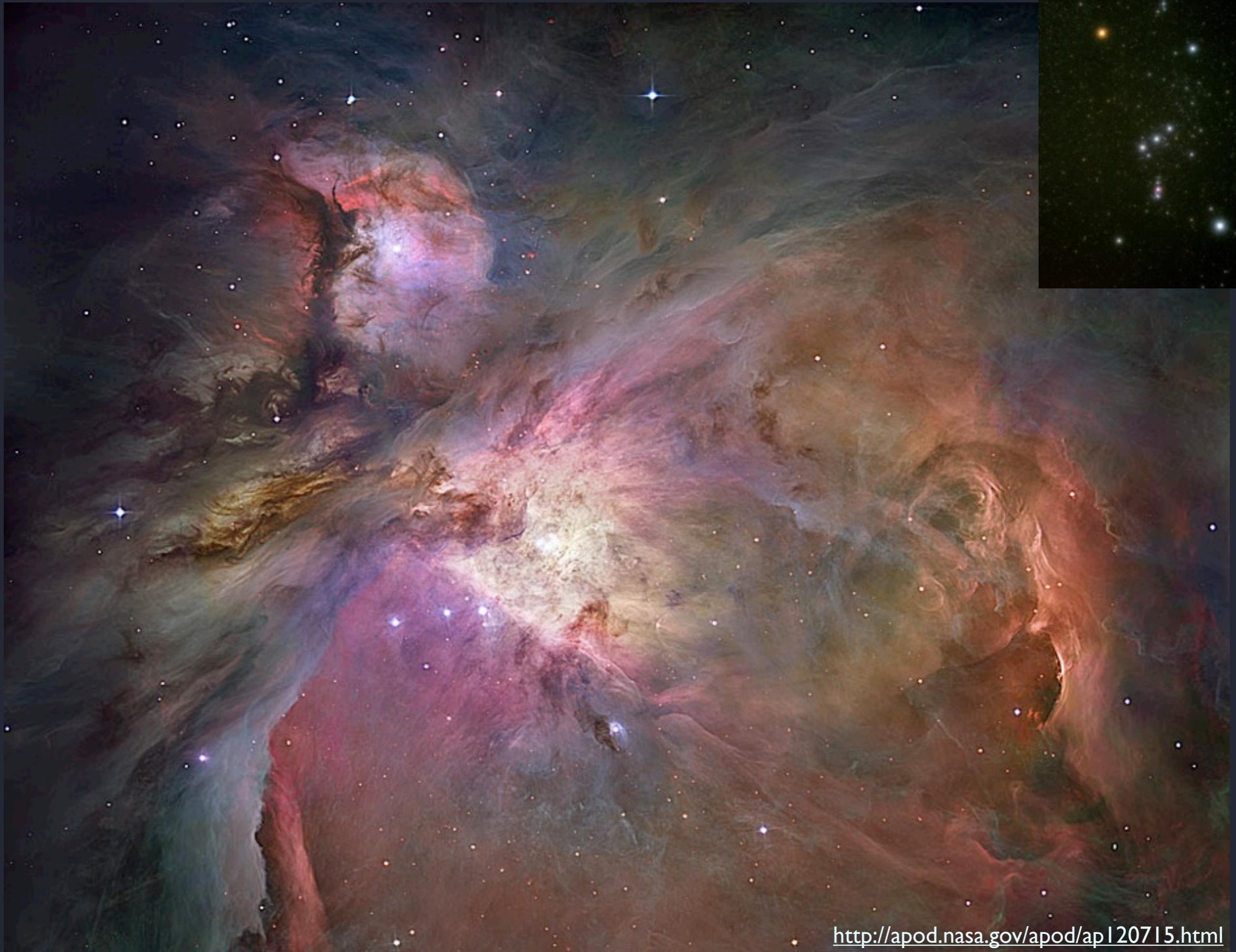
## When I Heard The Learned Astronomer by Walt Whitman

When I heard the learn'd astronomer,  
When the proofs, the figures, were ranged in columns before me,  
When I was shown the charts and diagrams to add, divide, and  
measure them,  
When I sitting heard the astronomer where he lectured with much  
applause in the lecture-room,  
How soon unaccountable I became tired and sick,  
Till rising and gliding out I wander'd off by myself,  
In the mystical moist night-air, and from time to time,  
Look'd up in perfect silence at the stars.













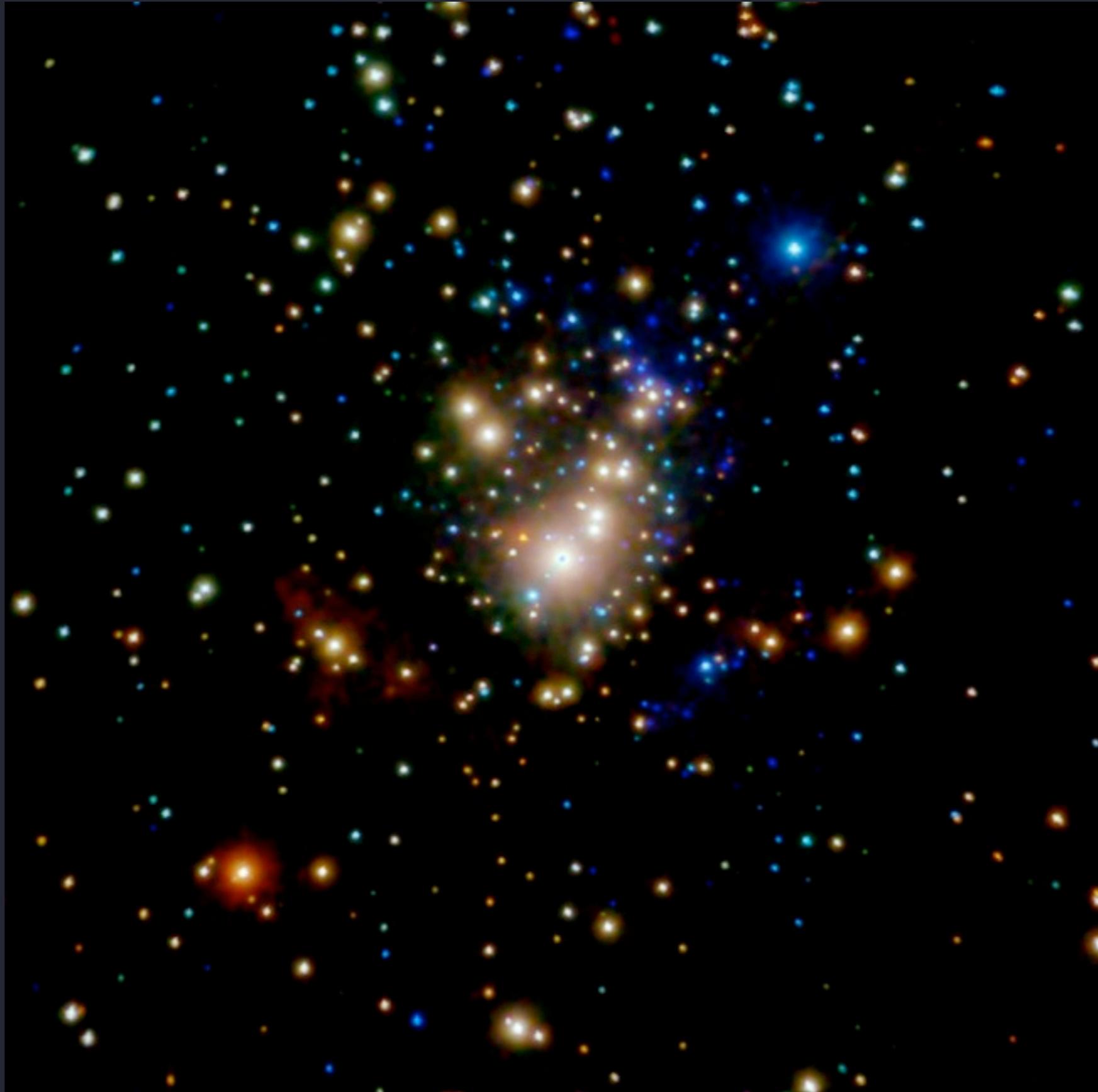
# Song of Myself

CELEBRATE myself, and sing myself,  
And what I assume you shall assume,  
For every atom belonging to me as good belongs to you.

I loafe and invite my soul,  
I lean and loafe at my ease observing a spear of summer grass.

My tongue, every atom of my blood, form'd from this soil, this  
air,  
Born here of parents born here from parents the same, and their  
parents the same,  
I, now thirty-seven years old in perfect health begin,  
Hoping to cease not till death.

# Orion Nebula in *X-rays*



# how big is the Moon?



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# a lunar eclipse: Moon in the shadow of the Earth



# Moon during a lunar eclipse

