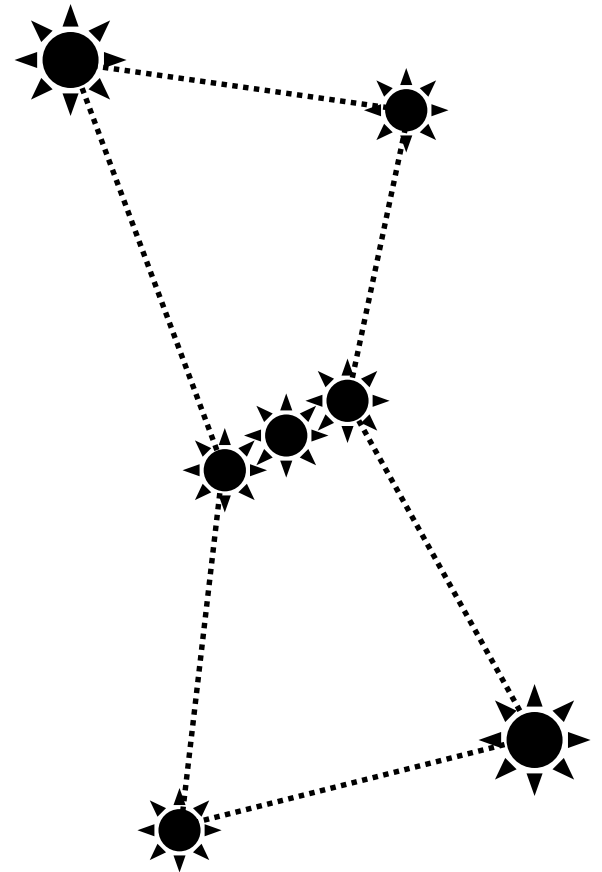


Constellation Close-Up: Orion

Les Lamb & James Appleton



Discussion Topics

- Introduction to Orion
- Sword of Orion
- Orion Nebula
- Horsehead Nebula
- M78 nebulosity
- Double stars in Orion

Introduction to Orion

Orion

Barn-door mount, 45 min, Kodak Gold 400 film



Sword of Orion

South Orion

135mm lens, driven, Kodak 1000 ASA, 10sec



M42 - The Orion Nebula

M42, the Orion Nebula

10" telescope, eyepiece projection, 30s, 1000 ASA



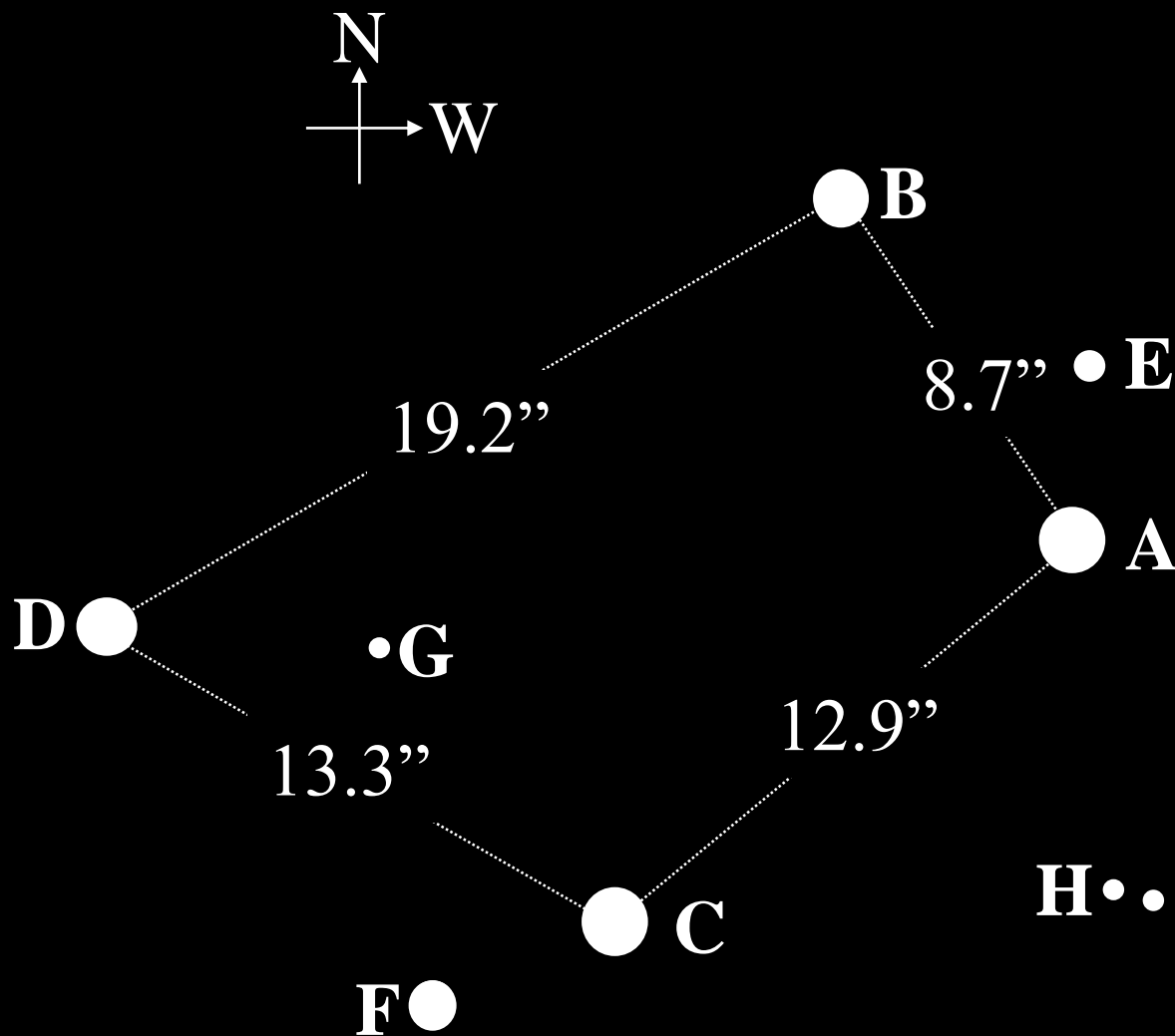
Classic M42, the Orion Nebula

36" reflector at Lick
Observatory



The Trapezium (Theta-1 Orionis)

Star	Magnitude
A	6.8 (var)
B	7.0 (var)
C	5.4
D	6.3
E	11.5
F	11.1
G	16.0
H	16.0 each cpt



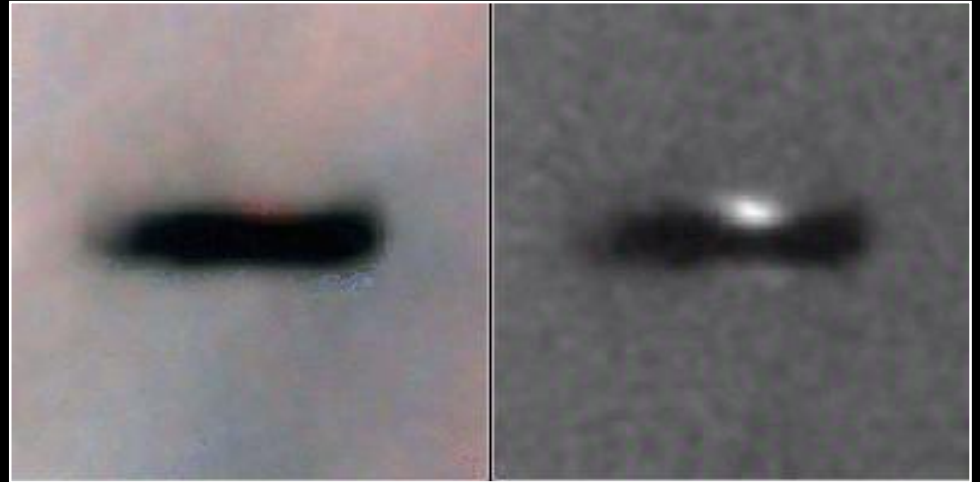
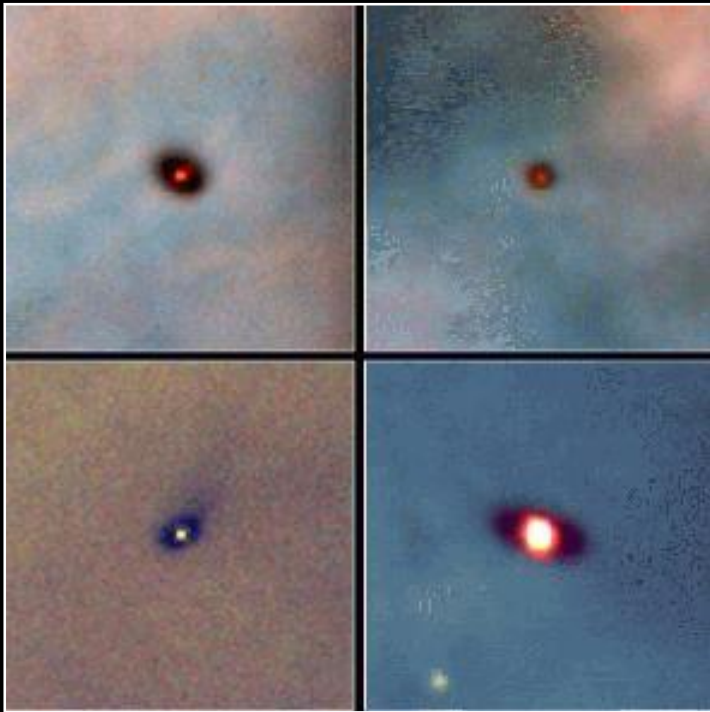
M42, the Orion Nebula

Hubble space telescope
(mosaic of 45 images,
1994-95)



"Proplyds" Within M42

Hubble space telescope
images, 1994-95



The Horsehead Nebula

The Horsehead, B33



M78 Nebulosity

M78



Double Stars in Orion

Double Stars in Orion

Star	Magnitudes	Separation	Notes
Rigel (beta)	0.1, 6.8	9.5''	Difficult because of glare from primary.
Alnitak (zeta)	1.9, 4.0	2.3''	Test for 75mm telescope
Mintaka (delta)	2.2, 6.3	53''	Wide separation
Eta	3.8, 4.8	1.5''	Test for 100mm telescope
Sigma	3.7, 10, 7.5, 6, 8	11'', 13'', 42'', 30''	Quintuple star: all components visible to small telescope
Theta_1	6.8, 7.0, 5.4, 6.3	-	The Trapezium (see earlier slide)
Iota	2.7, 6.9, 11	11'', 50''	
Σ 747	4.7, 5.5	36''	Wide separation; same field as Iota
Lambda	3.6, 5.5	4.4''	
Rho	4.5, 8.3	7''	

Orion

Stars to
mag 7.0

Double
stars
indicated
by ○

