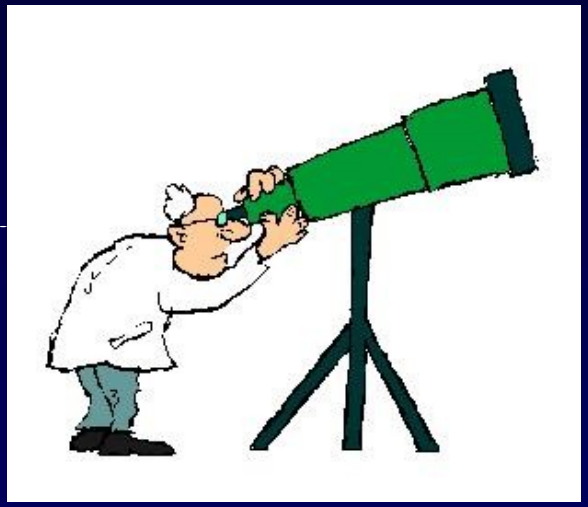
What's Up!

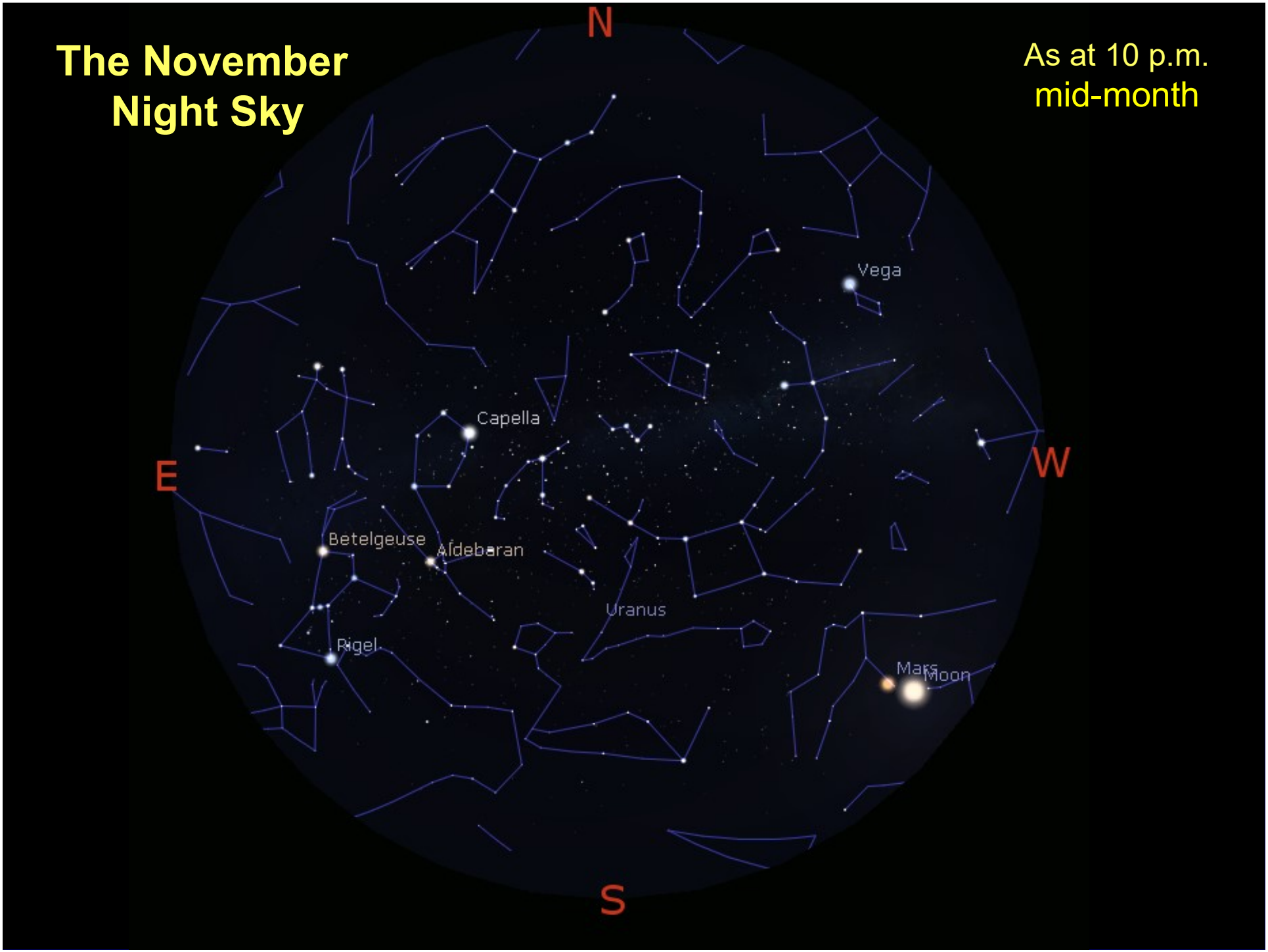
For November 2018



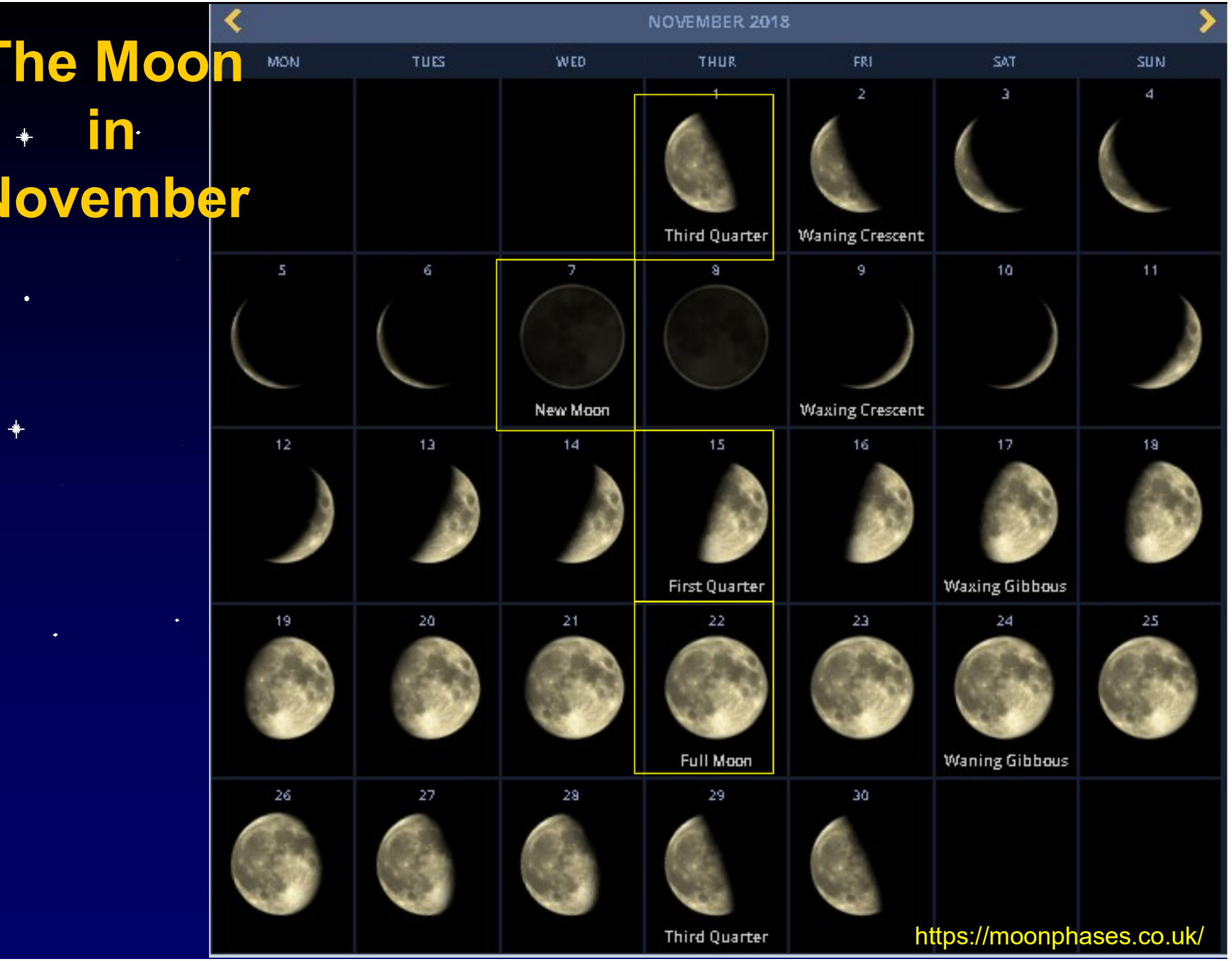
BROOKLANDSRADIO ONLINE The Sound of Surrey

The November Night Sky

As at 10 p.m.
mid-month



The Moon in November



What's Up - Planets

- **Mercury**
  - Very poorly placed this month.
- **Venus**
  - Becomes a bright morning object towards the middle of the month
- **Mars**
  - Still a splendid object in the Southern skies throughout the month, its pinkish red colour and brightness (Mag -0.3) making identification easy. A little fainter now but higher in the sky.

What's Up - Planets

- **Jupiter**
  - Not visible this month, but don't worry - it'll be back in late December
- **Saturn**
  - First week of the month only it can still be found as an early evening object, low in South South Western sky.
- **Uranus**
  - Visible all night at Mag +5.7 at Aries/Pisces border
- **Neptune**
  - Telescopic object at Mag +7.9 in Aquarius, best around midnight

Events of Interest in October

- **4th** Waning crescent Moon will be 3° from M44 Beehive Cluster in early hours.
- **8th** Peak of Draconid Meteor Shower, possibly higher rate than its normal 10/hour. Best around midnight to 1 a.m. on 9th
- **11th** Waxing crescent Moon will be 4.5° from Jupiter, low in South West
- **14th** Waxing crescent Moon wi… 4.7° from Saturn, low in South South West
- **16th** Lunar X & Lunar V effects on Mo… …ht on terminator, best around 7 pm BST
- **18th** Gibbous Moon will be 3° from Mars in South
- **27th** Aldeberan 4° from waning gibbous Moon.
- **30th** Mercury & Jupiter just 3.5° apart low in SW after sunset

NB BST ends on 28th, set clocks back 1 hour to GMT (UT)

Events of Interest in November

- **5th** Peak of Southern Taurid meteor shower
- **11th** Moon will be 1° from Saturn at sunset 
- **12th** Peak of Northern Taurid meteor shower
- **16th** Mars just 5° from Moon
- **17th** Peak of Leonid meteor shower, best in early hours of 18th
- **20th** Uranus 5° north of Moon. 

November's Suggested Constellation - but which one?

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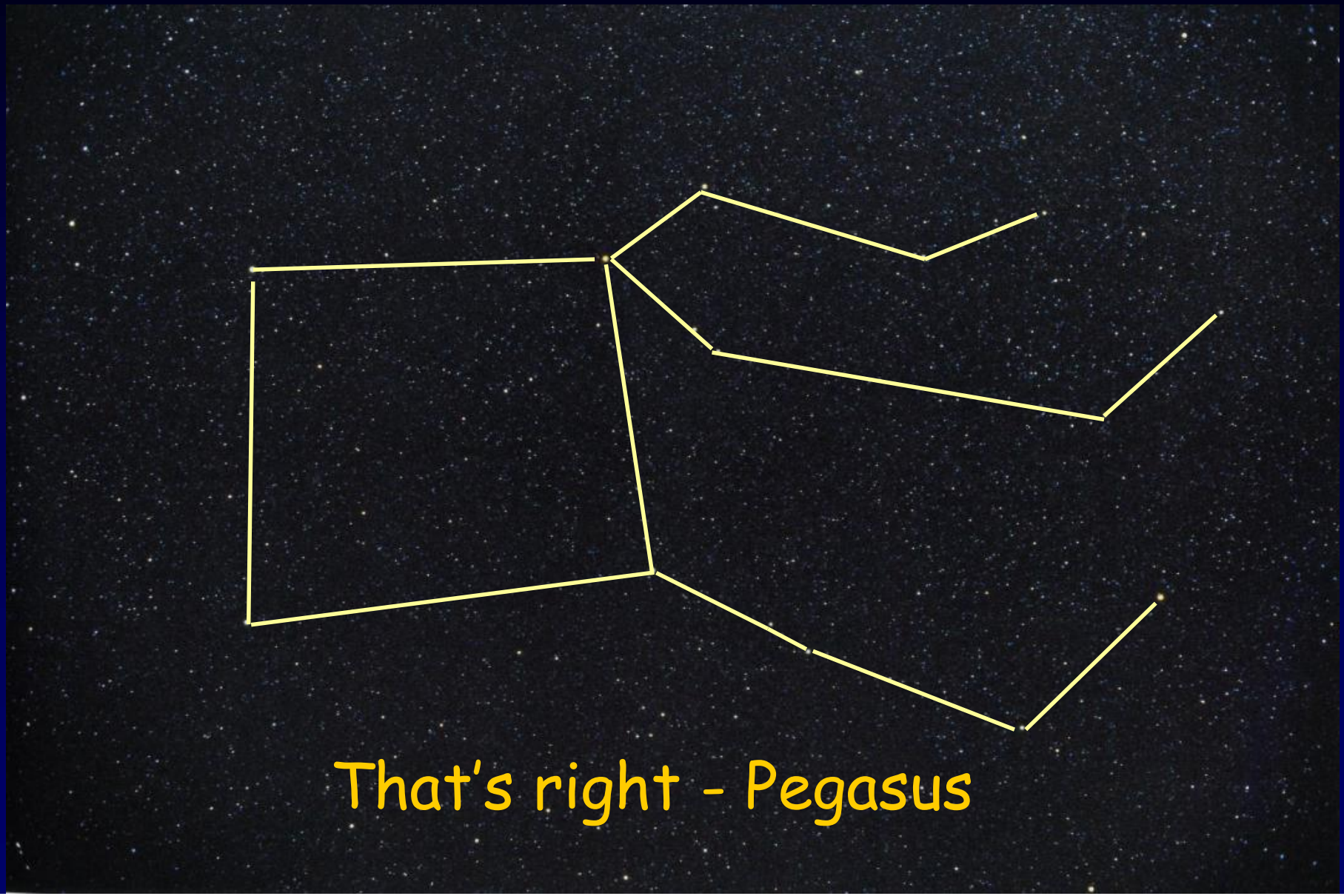
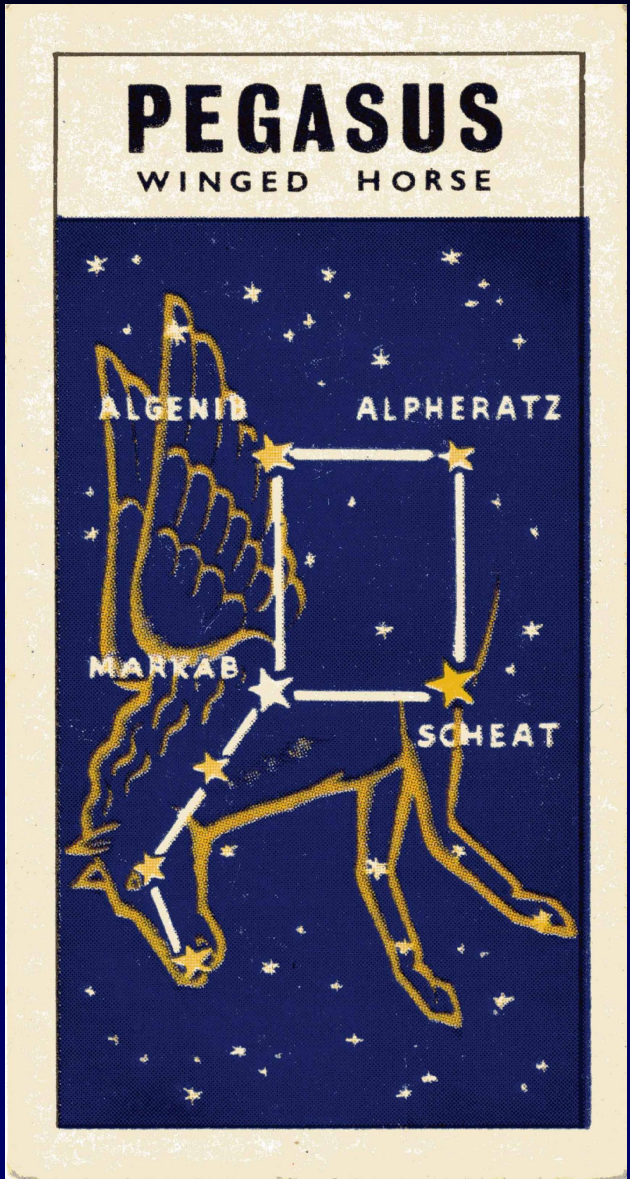


That's right - Pegasus

November's Suggested Constellation



A SERIES OF 50 No. 42

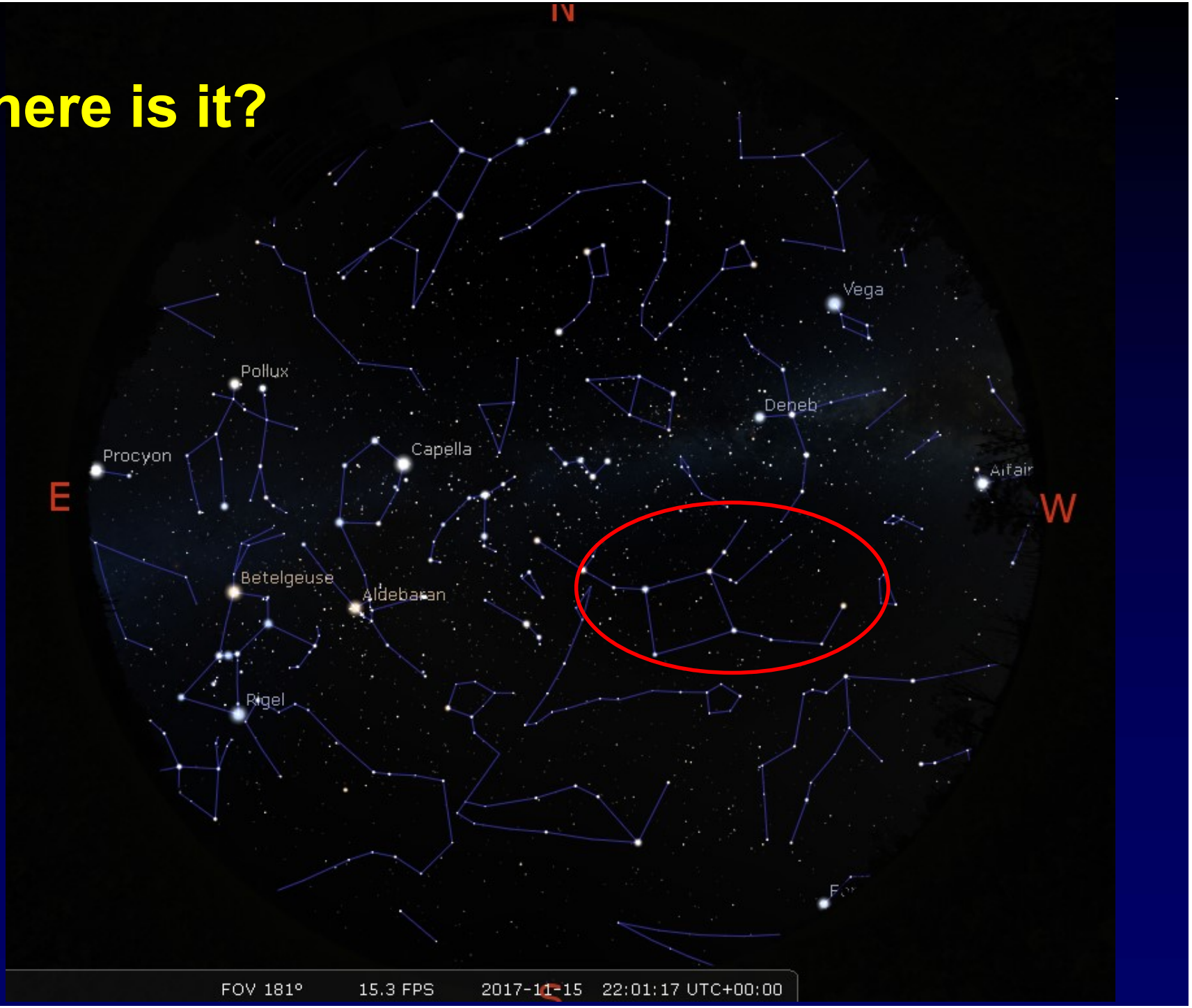
OUT INTO SPACE

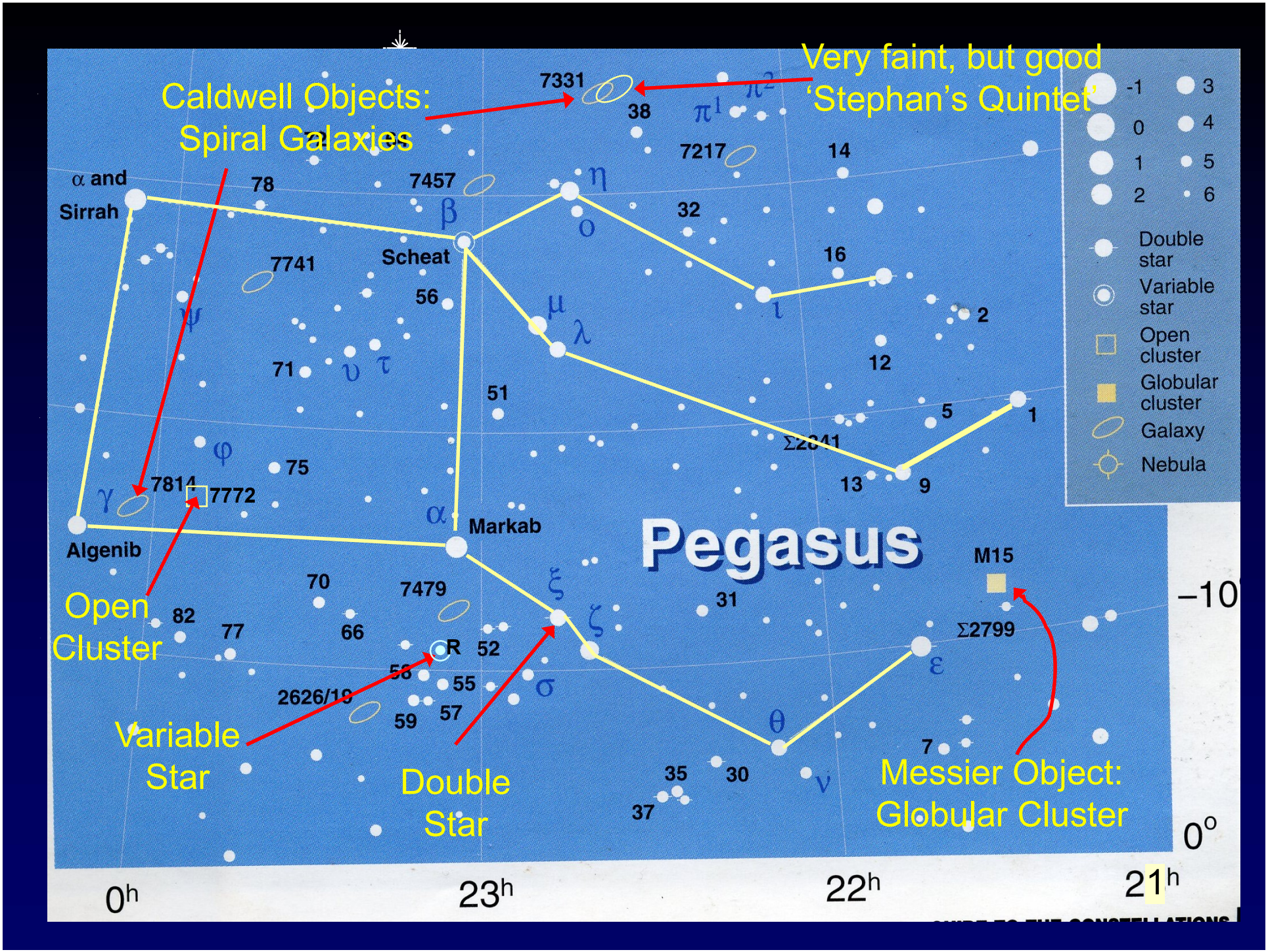
Approved by A. Hunter, Ph.D., Sec. Royal Astronomical Society

PEGASUS (The Winged Horse)

Pegasus is seen upside down in our latitudes. Only half of Pegasus is illustrated in celestial maps—one star, Alpheratz, forming part of the adjoining constellation of Andromeda. It is prominent on the meridian at midnight in September. There are many small stars within and in clear atmosphere over 100 may be observed. Markab, a white star of second magnitude, is a navigational star. Scheat is a deep yellow star also of second magnitude. According to mythology Bellerophon tried to ride to heaven on Pegasus' back and was thrown off.

Where is it?


N
E
W
Vega
Pollux
Deneb
Procyon
Capella
Altair
Betelgeuse
Aldebaran
Rigel
FOV 181°
15.3 FPS
2017-11-15 22:01:17 UTC+00:00


Caldwell Objects:
Spiral Galaxies
Very faint, but good
'Stephan's Quintet'
Open
Cluster
Variable
Star
Double
Star
Messier Object:
Globular Cluster
Pegasus
α and
Sirrah
Scheat
Markab
Algenib
7331
7457
7741
7814
7772
7479
7217
Σ2841
Σ2799
M15
2626/19
38
78
56
71
51
75
70
82
77
66
52
55
57
59
14
32
16
2
12
5
1
13
9
31
35
30
37
7
-1
0
1
2
3
4
5
6
Double star
Variable star
Open cluster
Globular cluster
Galaxy
Nebula
–10°
0°
0h
23h
22h
21h

Messier & Caldwell Objects in Pegasus

M15 (NGC 7078)

Distance 30,600 light years
Visual Brightness Magnitude 6.3
Apparent Dimension 18.0 arc minutes
Discovered 1746 by Jean-Dominique Miraldi II

C30 (NGC 7331)

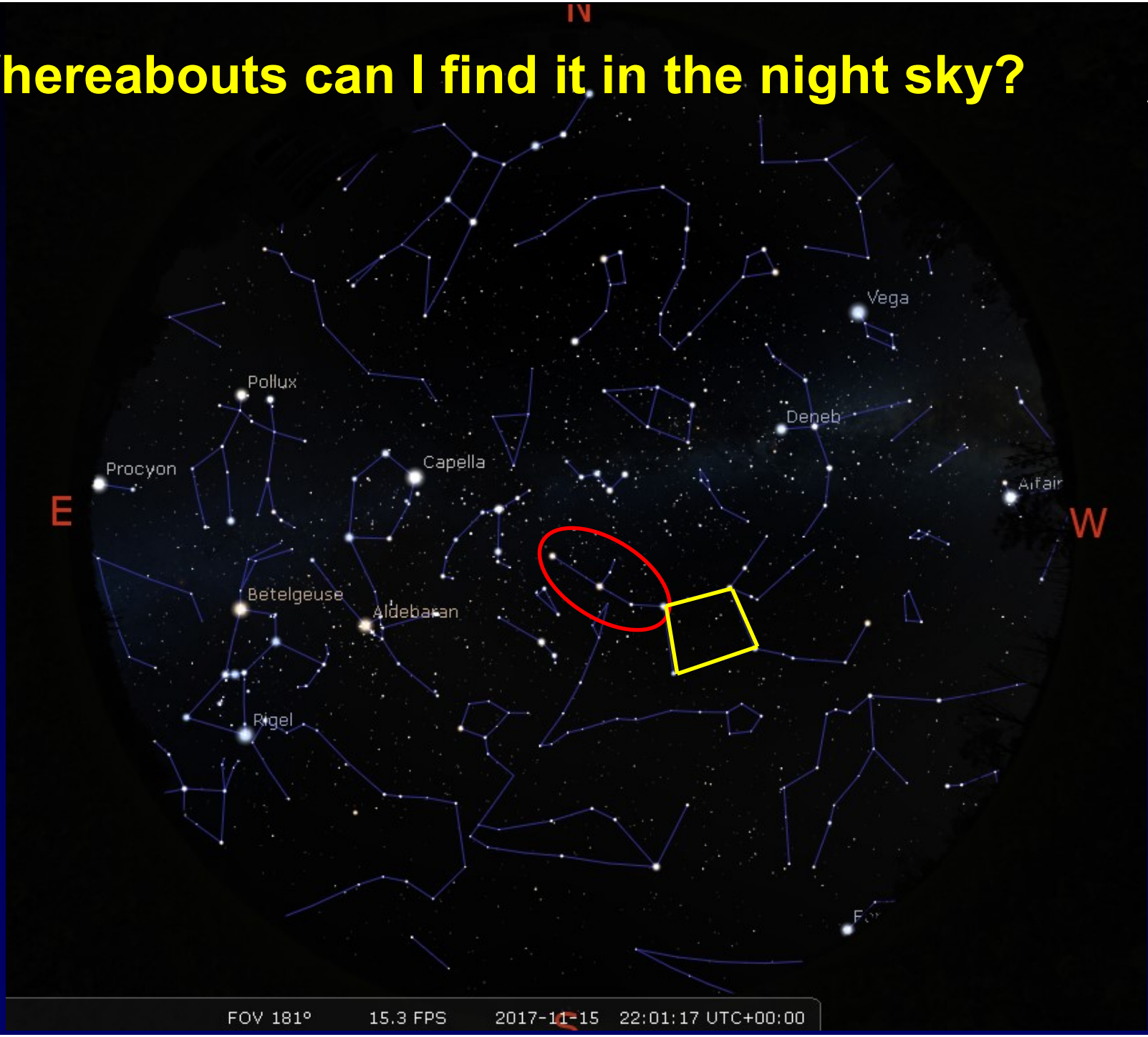
Distance 47,000,000 light years
Visual Brightness Magnitude 9.5
Apparent Dimension 9.7 arc minutes
Discovered 1784 by William Herschel

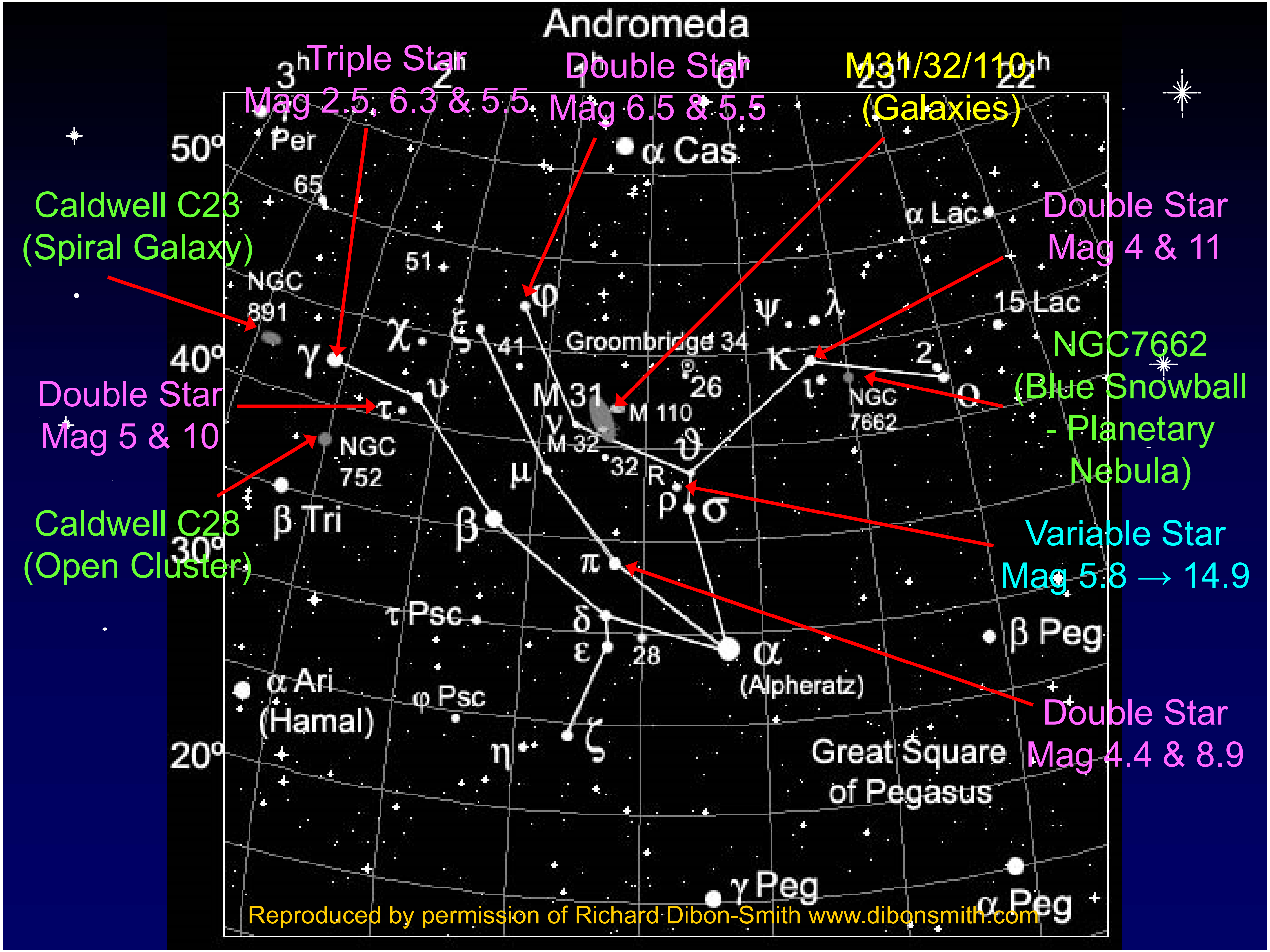
November's other Suggested Constellation

Andromeda: the myth

- In Greek mythology Andromeda was the daughter of Cassiopeia and Cepheus. Cassiopeia angered Poseidon by claiming that both she and Andromeda were more beautiful than any of Poseidon's nymphs. Poseidon retaliated by chaining Andromeda to a rock to be eaten by his sea-monster. Perseus arrived in the nick of time, flying on Pegasus and clutching Medusa's head, which he used to kill the monster. Having rescued her, what else could he do? He married her!

Whereabouts can I find it in the night sky?





Andromeda
Triple Star
Mag 2.5, 6.3 & 5.5
Double Star
Mag 6.5 & 5.5
M31/32/110
(Galaxies)
Caldwell C23
(Spiral Galaxy)
Double Star
Mag 4 & 11
NGC7662
(Blue Snowball
- Planetary
Nebula)
Double Star
Mag 5 & 10
Caldwell C28
(Open Cluster)
Variable Star
Mag 5.8 → 14.9
Double Star
Mag 4.4 & 8.9
3h
2h
1h
0h
23h
22h
50°
40°
30°
20°
Per
65
51
NGC 891
α Cas
α Lac
15 Lac
Groombridge 34
26
M 31
M 110
M 32
NGC 7662
NGC 752
β Tri
τ Psc
α Ari
(Hamal)
φ Psc
α
(Alpheratz)
β Peg
Great Square
of Pegasus
γ Peg
α Peg
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Messier Objects in Andromeda

Distance 2,900,000 light years
Visual Brightness Magnitude 3.4

Apparent Dimensions 178 arc minutes
Discovered 964 Abd-al Al-Sufi

Messier Objects in Andromeda (contd)

M32 (NGC 221)

Distance 2,900,000 light years
Visual Brightness Magnitude 8.1
Apparent Dimension 8 arc minutes
Discovered 1749 Le Gentil

M110 (NGC 205)

Distance 2,900,000 light years
Visual Brightness Magnitude 8.5
Apparent Dimension 17 arc minutes
Discovered 1780 Messier

Caldwell Objects in Andromeda

C23 (NGC 891)

Distance 10,000,000 light years
Visual Brightness Magnitude 10.0
Apparent Dimension 13.5 arc minutes
Discovered 1784 William Herschel

C28 (NGC 752)

Distance 1,300 light years
Visual Brightness Magnitude 5.7
Apparent Dimension 60 arc miutes
Discovered 1786 William Herschel

Another Deep Sky Object of interest in Andromeda

NGC 7669
Blue Snowball Nebula

Distance 2,200 light years
Visual Brightness Magnitude 8.3
Apparent Dimension 18 arc seconds
Discovered 1865 Gaspare Ferrari

Meetings at Local Societies

- **Guildford AS** *Lecture Theatre L, Uni of Surrey*
  - Thursday 1st November, 7.30 p.m.
    - **The Intimate Lives of Stars**
      - » Dr Ghina M. Halabi
        - » Wolfson College, University of Cambridge

Meetings at Local Societies

- **Farnham AS** *Aldershot Cricket Club*
  - Tuesday 13th November, 7.45 p.m.
    - **Galaxies and Large Scale Structures**
      - Charles Dixon
        - » Farnham AS

Meetings at Local Societies

- **Croydon AS** *Royal Russell School, Coombe Lane, Croydon*
  - Friday 2nd November, 19.45 hrs
    - The Voyager Legacy
      - Professor Gary Hunt
        - » Cambridge University
  - Friday 16th November, 19.45 hrs
    - TBA
  - Friday 30th November, 19.45 hrs
    - Aurorae on earth and Other Planets
      - Professor Alan Aylwards
        - » University College London

Meetings at Local Societies

- **Ewell AS** *Nonsuch High School for Girls, Cheam*
  - Friday 9th November, 19.45 hrs
    - Dark Energy and the Ever Expanding Cosmos
      - Prof Carolin Crawford
        - » Institute of Astronomy, Cambridge


"That's all Folks!"