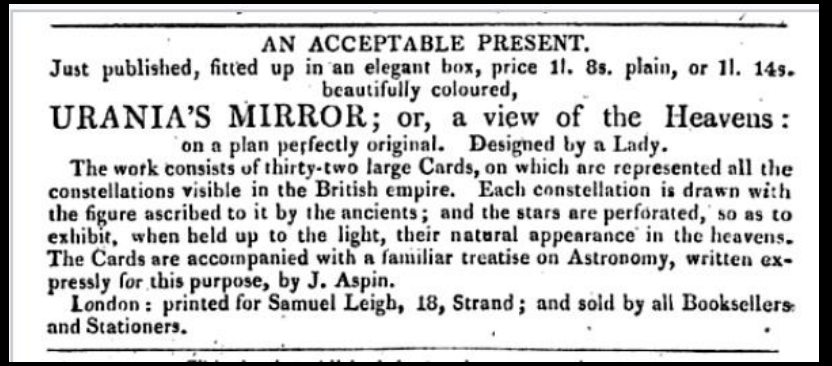
Stargazing 101: May

Constellation Coma Berenices and it's treasures

Learn how to find Coma Berenices, and explore one of the of the best galaxies clusters



AN ACCEPTABLE PRESENT.

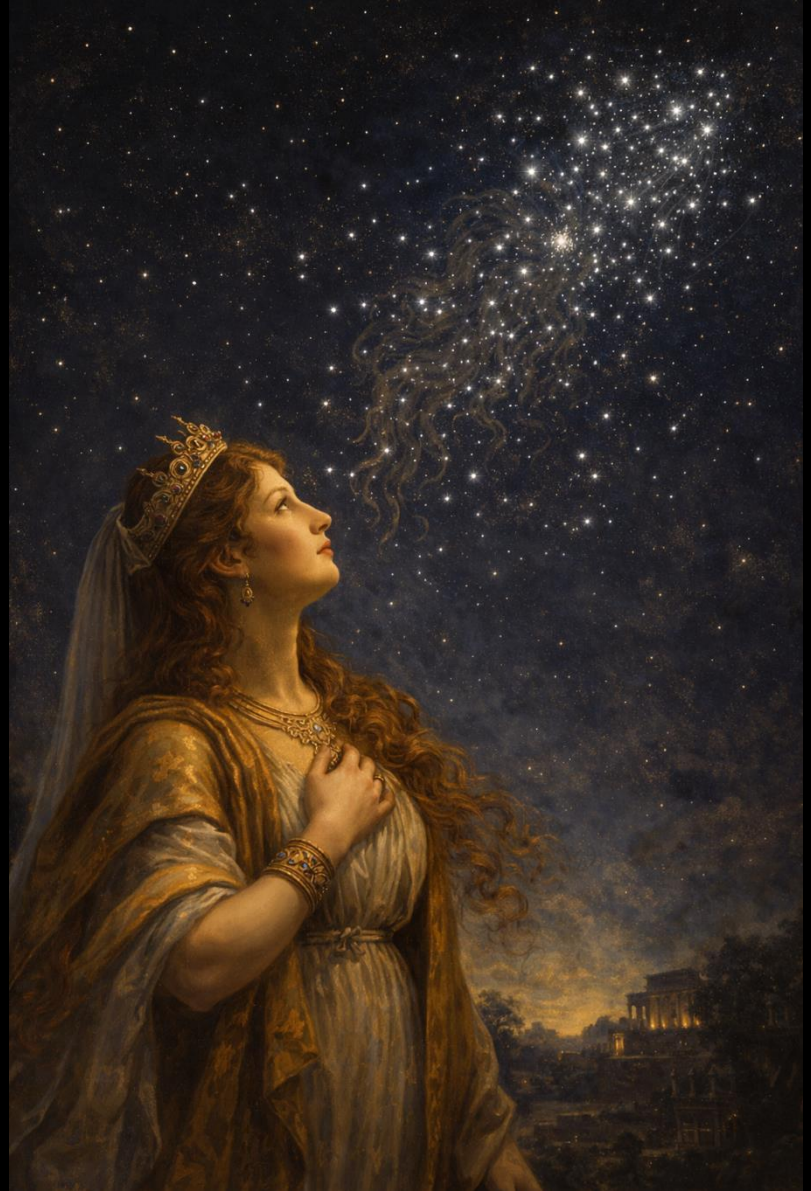
Just published, fitted up in an elegant box, price 1l. 8s. plain, or 1l. 14s. beautifully coloured,

URANIA'S MIRROR; or, a view of the Heavens: on a plan perfectly original. Designed by a Lady.

The work consists of thirty-two large Cards, on which are represented all the constellations visible in the British empire. Each constellation is drawn with the figure ascribed to it by the ancients; and the stars are perforated, so as to exhibit, when held up to the light, their natural appearance in the heavens. The Cards are accompanied with a familiar treatise on Astronomy, written expressly for this purpose, by J. Aspin.

London: printed for Samuel Leigh, 18, Strand; and sold by all Booksellers and Stationers.

The 1824 star chart of Virgo is card number 10 from Urania's Mirror; or, a view of the Heavens, a set of 32 astronomical star chart cards published in London.



Greek mythology

Queen Berenice was the wife of King Ptolemy III of Egypt.

Berenice was beautiful, with long amber tresses.

She wanted to ensure Ptolemy returned safely from battle during the Third Syrian War.

An Oracle Advised her to cut her long hair and make it an offering to Aphrodite (the goddess of love and beauty).

Zeus and Aphrodite were touched by the gesture, so once Ptolemy returned safety, they placed her hair in heaven to be admired by everyone.

Image ChatGPT

Note: Not a direct Ojibwe Mythology pattern

To find Coma Berenices:

Find big dipper
Arc to Arcturus
Acturus / Dubhe form
Triangle with the open
Cluster Melotte 111
Or look between Dubhe
and Denebola

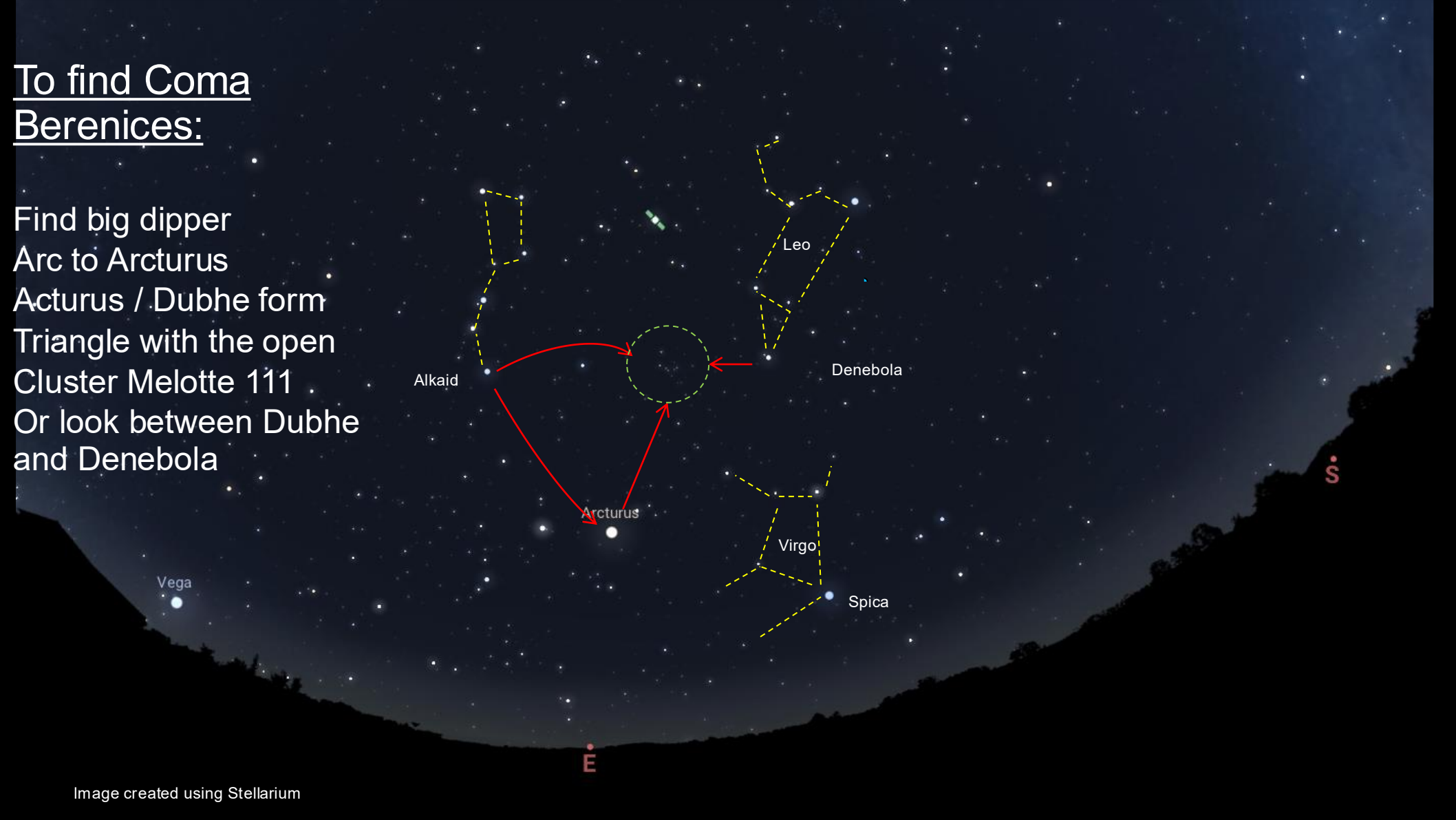
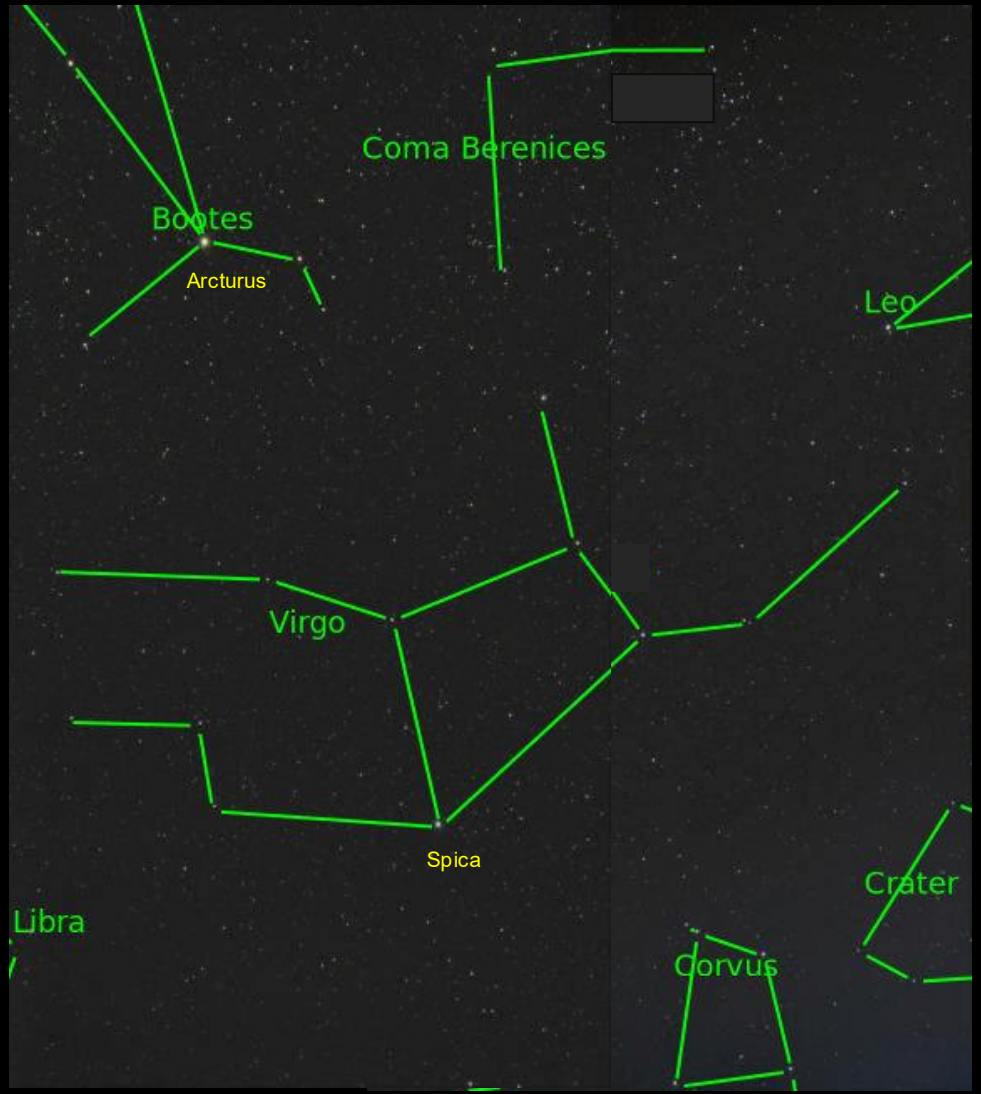


Image created using Stellarium



Left View of region Right same view with the Constellation lines added taken with A Seestar S30 Allenford Ontario

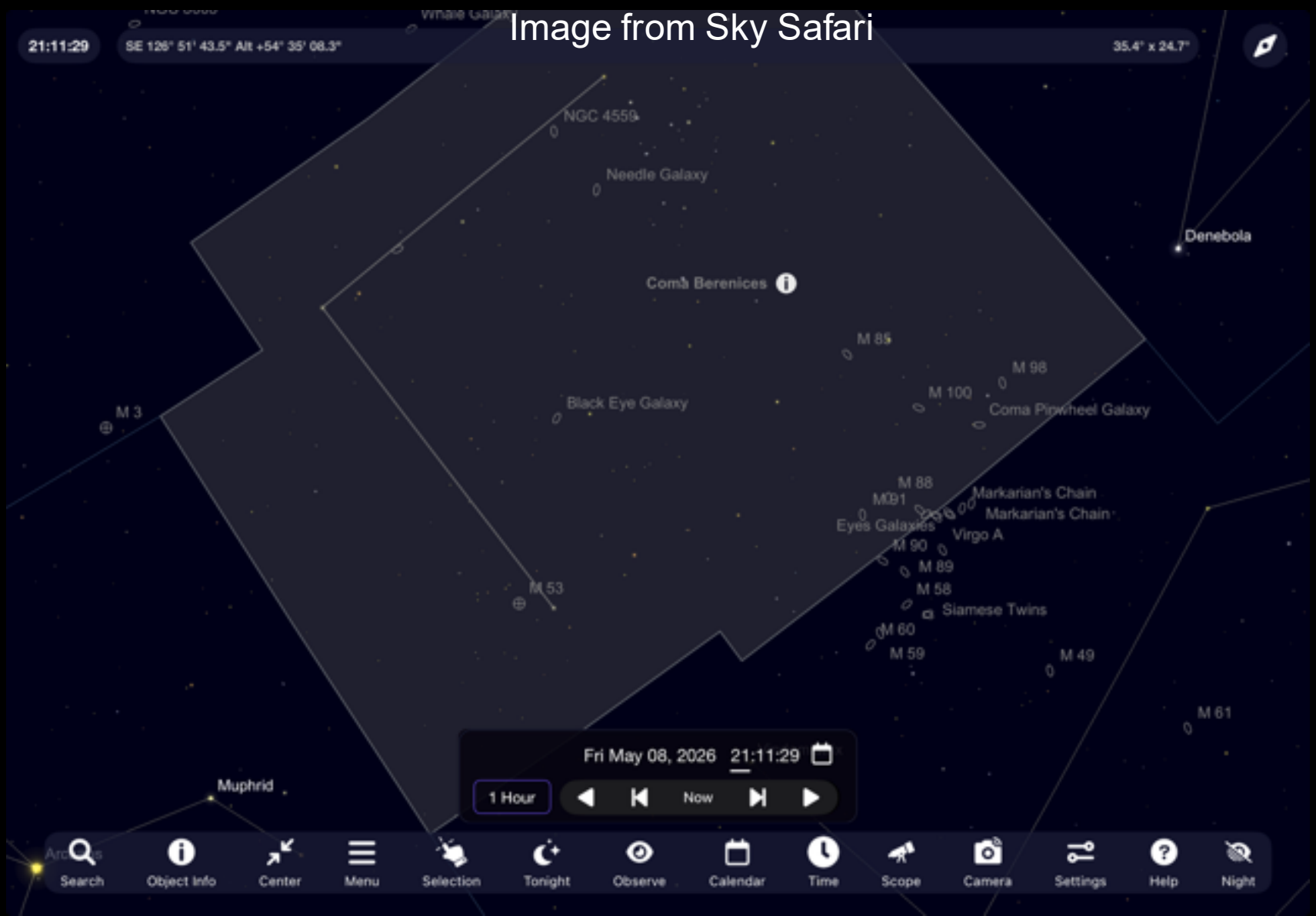


Image from Sky Safari
21:11:29
SE 126° 51' 43.5" Alt +54° 35' 08.3"
35.4' x 24.7'
NGC 4559
Needle Galaxy
Denebola
Coma Berenices
M 85
M 98
M 100
Coma Pinwheel Galaxy
Black Eye Galaxy
M 3
M 88
M91
Markarian's Chain
Markarian's Chain
Eyes Galaxies
Virgo A
M 90
M 89
M 58
Siamese Twins
M 60
M 59
M 49
M 53
M 61
Muphrid
Fri May 08, 2026 21:11:29
1 Hour
Now
Search
Object Info
Center
Menu
Selection
Tonight
Observe
Calendar
Time
Scope
Camera
Settings
Help
Night

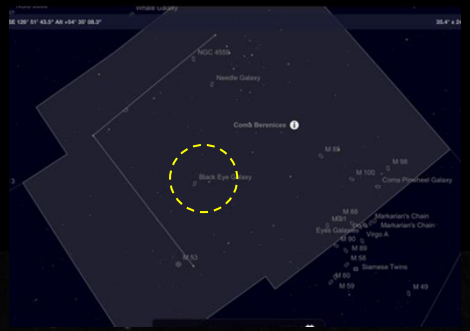
Coma Star Cluster / Melotte 111 (Naked Eye /binocular)

Huge 7.5 degrees
(15x size of moon)
280 Light years away
40 Stars
rough V shape

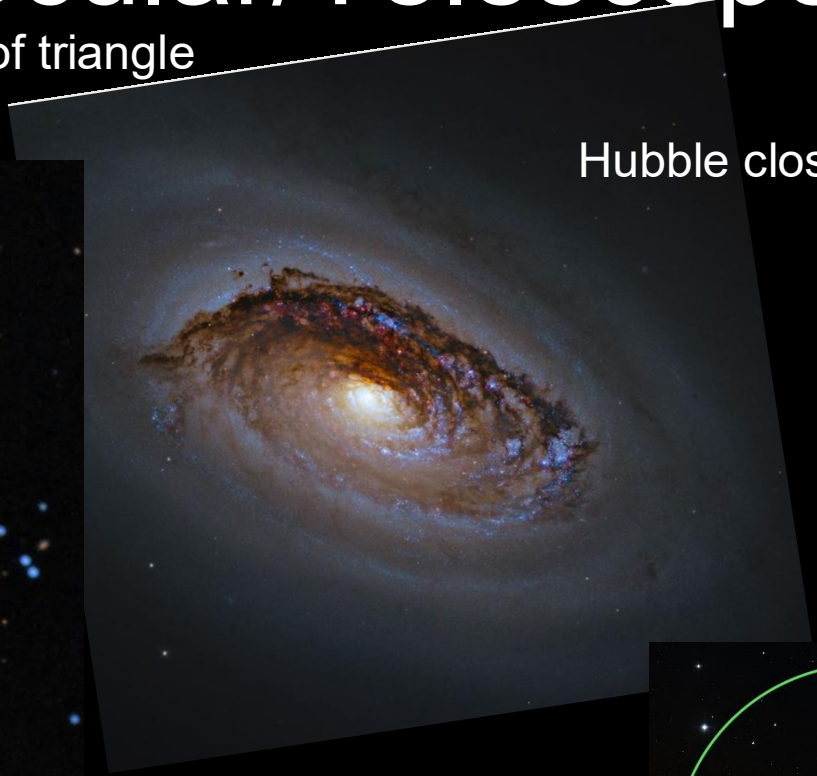
(Seestar S30 image Allenford)

M64 (Binocular/Telescope)

Find it 1/3 up diagonal of triangle



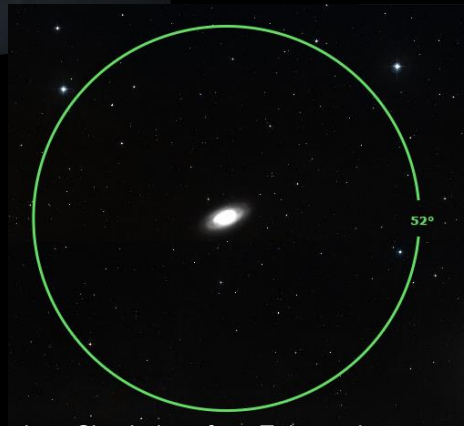
Hubble close up of core



Distance 17.3 Mly
Size ½ size of Milky way
The Dust obscures part of core

Image F. Williams 2hrs C8

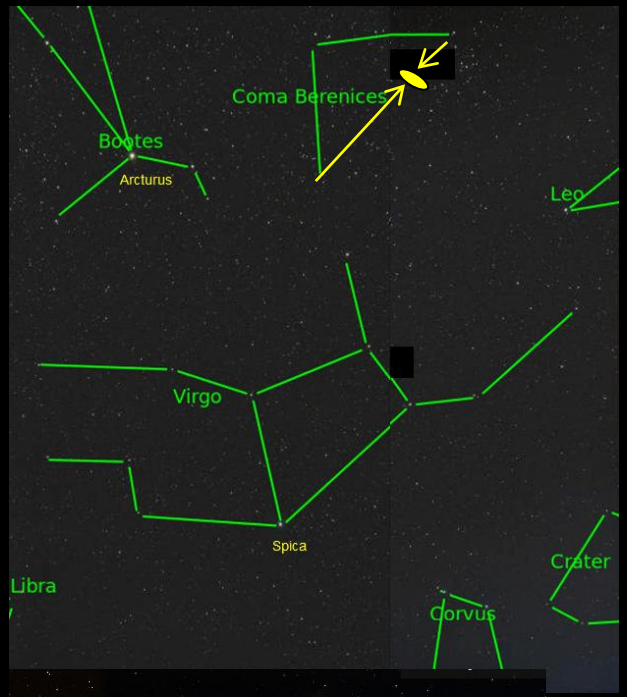
With small telescopes such as 8” Dobsonian
1200 focal length and a 25 mm eyepiece



Eyepiece Simulations from Telescopius.com

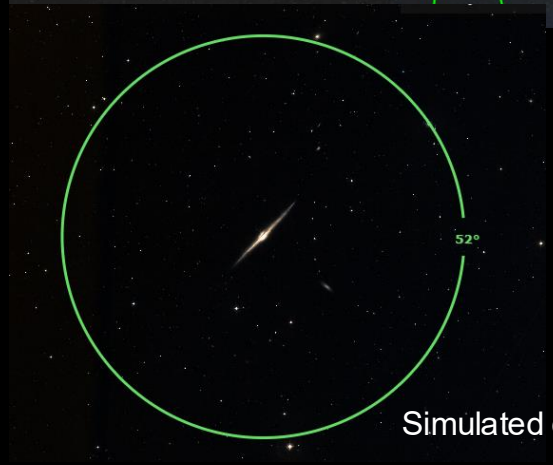
NGC 4565 (Needle Galaxy)

To find it locate Coma Berenices above virgo, then use the triangle and locate along diagonal ¼ way down from top right star (γ Com)



Distance ~40 Mly
Size slightly larger than milky way

Image Courtesy Marty Anderson

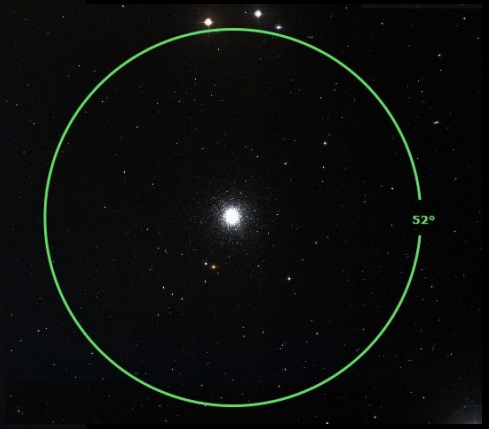


Simulated eyepiece view 8” dobsonian 1200mm fl 25mm eyepiece (telescopius.com)

M53

Find it at bottom star of triangle

Hubble close up of core



With small telescopes such as 8” Dobsonian 1200 focal length and a 25 mm eyepiece

Distance 58, 000 light years
Size ~200 light years
Composed of about 500,000 stars

Image F. Williams 33 min TV85 and DSLR

Eyepiece Simulations from Telescopius.com

Some Other Galaxies in Coma Berenices (telescope viewing)

(Find these by making the triangle into a Square they are clustered diagonally below that corner)

	M88	M91	M98	M99	M100
Distance	47 Mly	63.3 Mly	44.4 Mly	45.2 Mly	55 Mly
Size	135, 00 (similar to milky way)	105, 000 Ly (smaller than Milky way)	126, 000 Ly (similar to Milky way)	98,000 Ly (smaller than milky way)	166 000ly (larger than milky way)
Type	SA(rs)b	SBb(rs)	SAB(s)ab	SA(s)c	SAB(s)bc
Magnitude	9.6	10.2	10.1	9.9	9.3

FW

Hubble Image

Image: Adam Block/Mount Lemmon SkyCenter/University of Arizona

FW

FW

Why Coma Berenices is Great for Spring:

- Prominent in the sky in April - June
- Easy to find using the Big Dipper->Arcturus -> Denebola
- Visible with binoculars and small telescopes
- Rich in galaxies

- Great for Visual as well as astrophotography