

# April Constellations of the Month

## Leo

### Small Scope Objects:

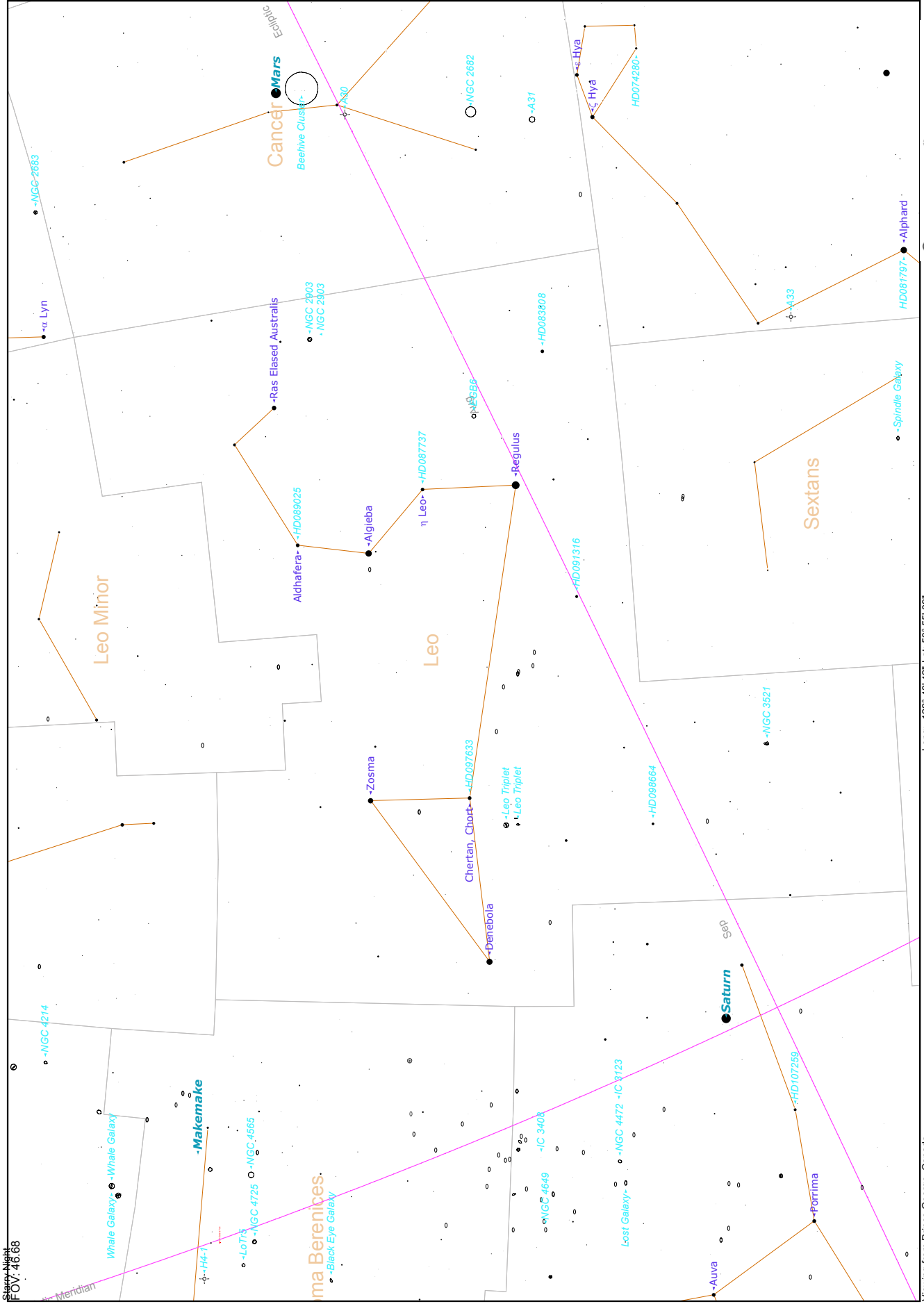
✓	Name	R.A.	Decl.	Details
	M65 <sup>I</sup> (NGC 3623)	11hr 18.9m	+13° 05'	A large, bright Sa/Sb spiral galaxy. 7.8 x 1.6 arc minutes, magnitude 10.2. Very high surface brightness showing good detail in medium sized 'scopes.
	M66 <sup>I</sup> (NGC 3627)	11hr 20.2m	+12° 59'	Another bright Sb galaxy, only 21 arc minutes from M65. Slightly brighter at mag. 9.7, measuring 8.0 x 2.5 arc minutes.
	M95 (NGC 3351)	10hr 44.0m	+11° 42'	An easy SBb barred spiral, 4 x 3 arc minutes in size. Magnitude 10.5, with a bright central core. The bar and outer ring of material will require larger aperture and dark skies.
	M96 (NGC 3368)	10hr 46.8m	+11° 49'	Another bright Sb spiral, about 42 arc minutes east of M95, but larger and brighter. 6 x 4 arc minutes, magnitude 10.1.
	M105 (NGC 3379)	10hr 47.8m	+12° 35'	Located about 48 arc minutes NNE of M96. This small elliptical galaxy measures only 2 x 2.1 arc minutes, but at mag. 10.3 has very high surface brightness.
	NGC 3384 <sup>I</sup>	10hr 48.3m	+12° 38'	Look for NGC 3384 <sup>I</sup> (110NGC) and NGC 3389 (mag 11.0 and 12.2) which form a small triangle with M105.
	NGC 2903 <sup>II</sup>	09hr 32.2m	+21° 30'	See comment for M105. The brightest galaxy in Leo, this Sb/Sc spiral galaxy shines at mag. 9.5. Look for a hazy patch 11 x 4.7 arc minutes in size 1.5° south of λ Leonis. Lots of detail visible on 8" and larger 'scopes. (110NGC)

### Big Scope Objects:

✓	Name	R.A.	Decl.	Details
	NGC 3628 <sup>I</sup>	11hr 20.3m	+13° 36'	This beautiful edge-on Sb spiral fits in the same low power field as M65/M66. Mag. 10.3, 12 x 2 arc minutes in size. Dust lane visible under good skies. (110NGC)
	NGC 3190 Group	10hr 18m	+21° 50'	Consisting of NGC 3190, 3185, 3187 and 3193. Three spirals and one elliptical galaxy, ranging from mag. 12.1 to 13.4.
	NGC 3607 <sup>I</sup>	11hr 16.9m	+18° 03'	A bright elliptical galaxy, 5.5 x 5 arc minutes, glowing at mag 9.9. Look for NGC 3605 and NGC 3608 in the same field. (110NGC)
	NGC 3377	10hr 48m	+13° 59'	A bright 11.2 mag elliptical galaxy, 5.2 x 2.9 arc minutes. Look for 15.1 mag. NGC 3377A 6.8 arc minutes NW.
	NGC 3655	11hr 23m	+16° 35'	A compact 12.3 mag Sc galaxy, 1.5 x 0.9 arc minutes.
	NGC 3521 <sup>I</sup>	11hr 05.8m	-00° 02'	A bright Sb spiral galaxy, mag 9.8, 9.5 x 5 arc minutes (110NGC)

### Challenge Objects:

✓	Name	R.A.	Decl.	Details
	Leo I	10hr 08m	+12° 18'	A faint E3 Dwarf elliptical galaxy, 0.3° N of Regulus. Mag 9.8, 10.7 x 8.3 arc minutes, very low surface brightness. Use medium power to remove Regulus from field, clean optics and good skies essential.



Starry Night  
FOV: 46.68

Viewing from Prince George, Canada  
Chart centre (J2000): RA: 10h 42m 41.0s Dec: 15° 20' 45"  
Altitude: 51° 14.577', Azimuth: 173° 47.611' (south)

Long: -122° 43' 42" Lat: 53° 55' 09"  
2010/04/15 10:01:07 PM (Local)  
Limiting Magnitude: 6.5

- ☉ Globular Cluster
- ☽ Cluster
- ⊕ Quasar
- ♁ Variable
- ♂ Multiple
- ♃ Planetary
- ☾ Galaxy

Whale Galaxy

Black Eye Galaxy

Makemake

Leo Minor

Leo

Sextans

Cancer

Mars

Beehive Cluster

Spindle Galaxy

Alphard

Saturn

Porrima

Auvera

Denebola

Chertan, Chort

Zosma

Regulus

Algieba

Ras Elased, Australis

Lyn

H4-T

LoT5

NGC 4725

NGC 4565

IC 3408

NGC 4649

NGC 4472

IC 3123

Lost Galaxy

HD 107259

HD 098664

NGC 3521

HD 091316

HD 087737

NGC 666

HD 083808

A31

HD 074280

Hya

Hya

A33

NGC 2682

NGC 2683

NGC 2303

NGC 2303

NGC 4214

NGC 2683

Meridian

# Ursa Major

## Naked Eye Objects:

✓	Name	R.A.	Decl.	Details
	Ursa Major Moving Cluster	.	.	"The Big Dipper" - the nearest open cluster, 70LY distant, 17 stars, possibly including $\alpha$ Corona Borealis.
	z UMa (Mizar)	.	.	The middle star in the handle of the dipper, magnitude 2.5. Forms an optical double with Alcor 11.8 arc minutes away in P.A. 72° and has been used for centuries as an eyesight test. Zeta is a true double with a mag 4.0 companion 14.4 arc seconds away in P.A. 151°.

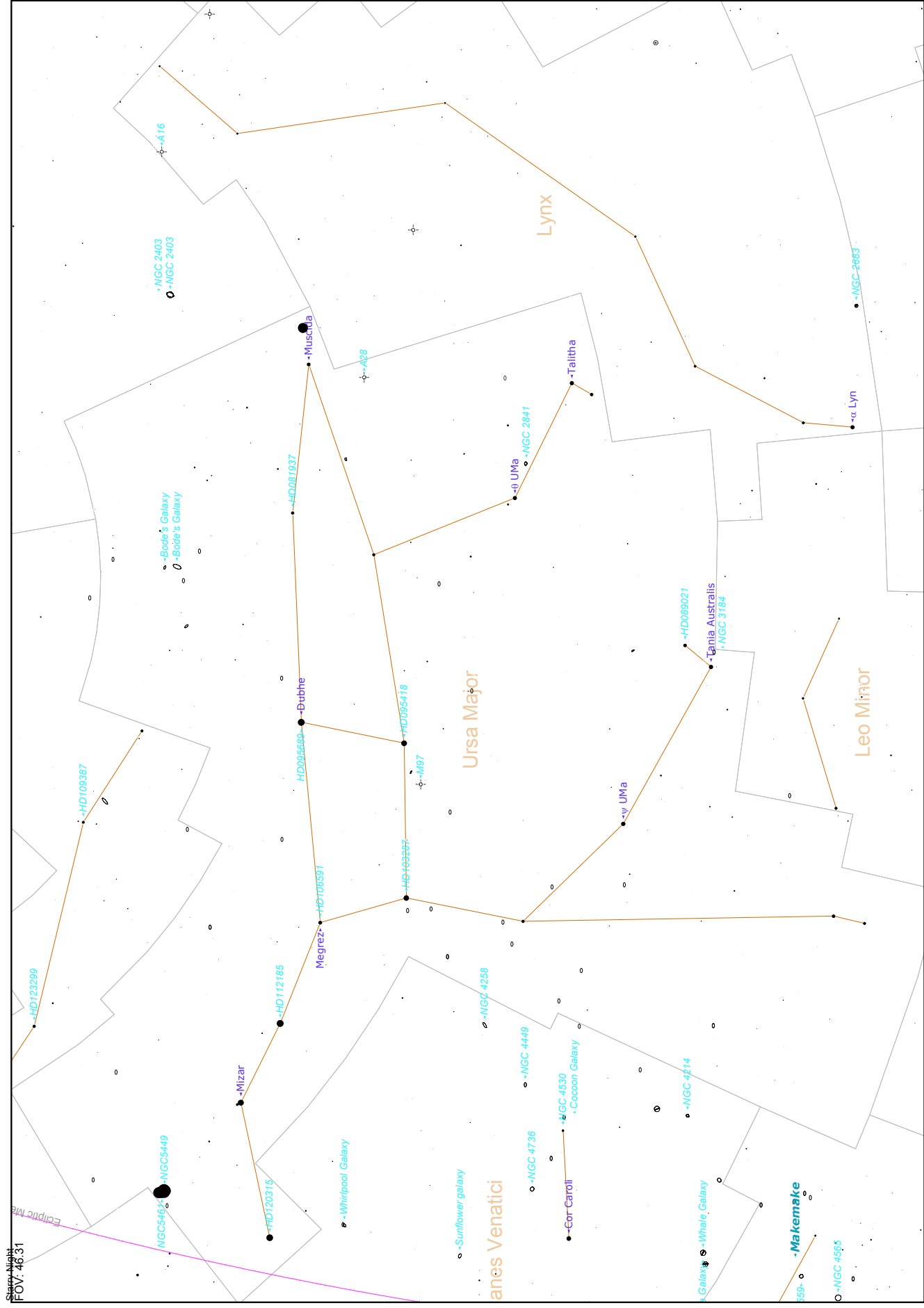
## Small Scope Objects:

✓	Name	R.A.	Decl.	Details
	M40	12hr 22.4m	+58° 05'	"Winnecke 4" - a double star, components are mag. 9.0 and 9.3. Separation of 50.1 arc seconds in P.A. 83°. The most disappointing of the Messier objects.
	M81 <sup>!</sup> (NGC 3031)	09hr 55.6m	+69° 04'	A bright mag 7.9 Sb spiral galaxy, 2.3 megaparsecs distant. Covers 10 x 18 arc minutes and is visible in binoculars from a good viewing site.
	M82 <sup>!</sup> (NGC 3034)	09hr 55.8m	+69° 41'	Another bright galaxy, only 38 arc minutes from M81. An edge-on irregular galaxy, mag 9.3, 8 x 3 arcminutes in size. Look for dark patches with larger 'scopes.
	M101 <sup>!</sup> (NGC 5457)	14hr 03.2m	+54° 21'	The "Pinwheel Galaxy" - a large, face-on Sc spiral, 22 x 20 arc minutes, mag 8.2. Difficult to observe due to low surface brightness. Sky conditions more important than aperture.
	M108 (NGC 3556)	11hr 11.5m	+55° 40'	A bright, near edge-on Sc galaxy. Mag 10.7, 7.8 x 1.4 arc minutes. Very high surface brightness, shows dark patches and mottling in larger scopes. Near $\beta$ UMa.
	M109 (NGC 3992)	11hr 57.6m	+53° 23'	An SBb barred spiral galaxy 40 arc minutes SE from $\gamma$ UMa. Mag 10.6, 6.4 x 3.5 arc minutes. Shows spiral structure easily in larger scopes.

## Big Scope Objects:

✓	Name	R.A.	Decl.	Details
	M97 <sup>!</sup> (NGC 3587)	11hr 14.8m	+55° 01'	The "Owl Nebula" - a magnitude 12 planetary nebula, 180 arc seconds in diameter, giving low surface brightness. Central star is 14th mag. Responds well to UHC or OIII filters, look for two dark patches in larger scopes which give it its nickname. 48 arc min SE of M108.
	NGC 2976	09hr 47m	+67° 54'	Small, bright Sb/Sd galaxy near M81. Mag 10.9, 3.4 x 1.3 arc minutes.
	NGC 3953	11hr 54m	+52° 20'	A bright SBb spiral, south of M109. Mag 10.8, 6 x 2.8 arc minutes
	NGC 2841 <sup>!!</sup>	09hr 22.0m	+50° 58'	A near edge-on Sb spiral. Mag 9.3, 8.1 x 3.8 arc minutes. (110NGC)
	NGC 3079 <sup>!</sup>	10hr 02.2m	+55° 41'	A mag 10.6 edge-on Sb spiral, 7.6 x 1.7 arc minutes. (110NGC)
	NGC 3184 <sup>!</sup>	10hr 18.3m	+41° 25'	A low surface brightness face-on Sc spiral. Mag 9.7, 6.8 x 6.8 arc minutes. (110NGC)
	NGC 3877 <sup>!</sup>	11hr 46.1m	+47° 30'	Edge-on Sb spiral. Mag 10.9, 5.4 x 1.5 arc minutes. (110NGC)
	NGC 3941 <sup>!</sup>	11hr 52.9m	+36° 59'	A small bright E3 elliptical, mag 9.8, 3.8 x 2.5 arc min. (110NGC)
	NGC 4026 <sup>!</sup>	11hr 59.4m	+50° 58'	Lens shaped S0 galaxy near $\gamma$ UMa. Mag 10.7, 5.1x1.4 arc min (110NGC)
	NGC 4088 <sup>!</sup>	12hr 05.6m	+50° 33'	Sc galaxy, mag 10.5, 5.8 x 2.5 arc minutes. Unusual mottling in larger scopes. Look for NGC 4085 in the same low power field. (110NGC)
	NGC 4157 <sup>!</sup>	12hr 11.1m	+50° 29'	Edge-on Sb spiral, near NGC 4088. Mag 11.9, 6.9x1.7 arc min. (110NGC)
	NGC 4605 <sup>!</sup>	12hr 40.0m	+61° 37'	Near edge-on SBcp spiral, mag 9.6, 5.5 x 2.3 arc min. (110NGC)

Starry Night  
FOV: 46.31



Viewing from Prince George, Canada  
Chart centre (J2000): RA: 10h 25m 21.5s Dec: 53° 58' 23"  
Altitude: 90° 0' 0.000", Azimuth: 186° 16.968" (south)

Long: -122° 43' 42" Lat: 53° 55' 09"  
2010/04/15 10:00:00 PM (Local)  
Limiting Magnitude: 6.5

- Galaxy
- Globular Cluster
- Variable
- Cluster
- + Quasar
- Multiple
- ⊕ Planetary

# Virgo

## Small Scope Objects:

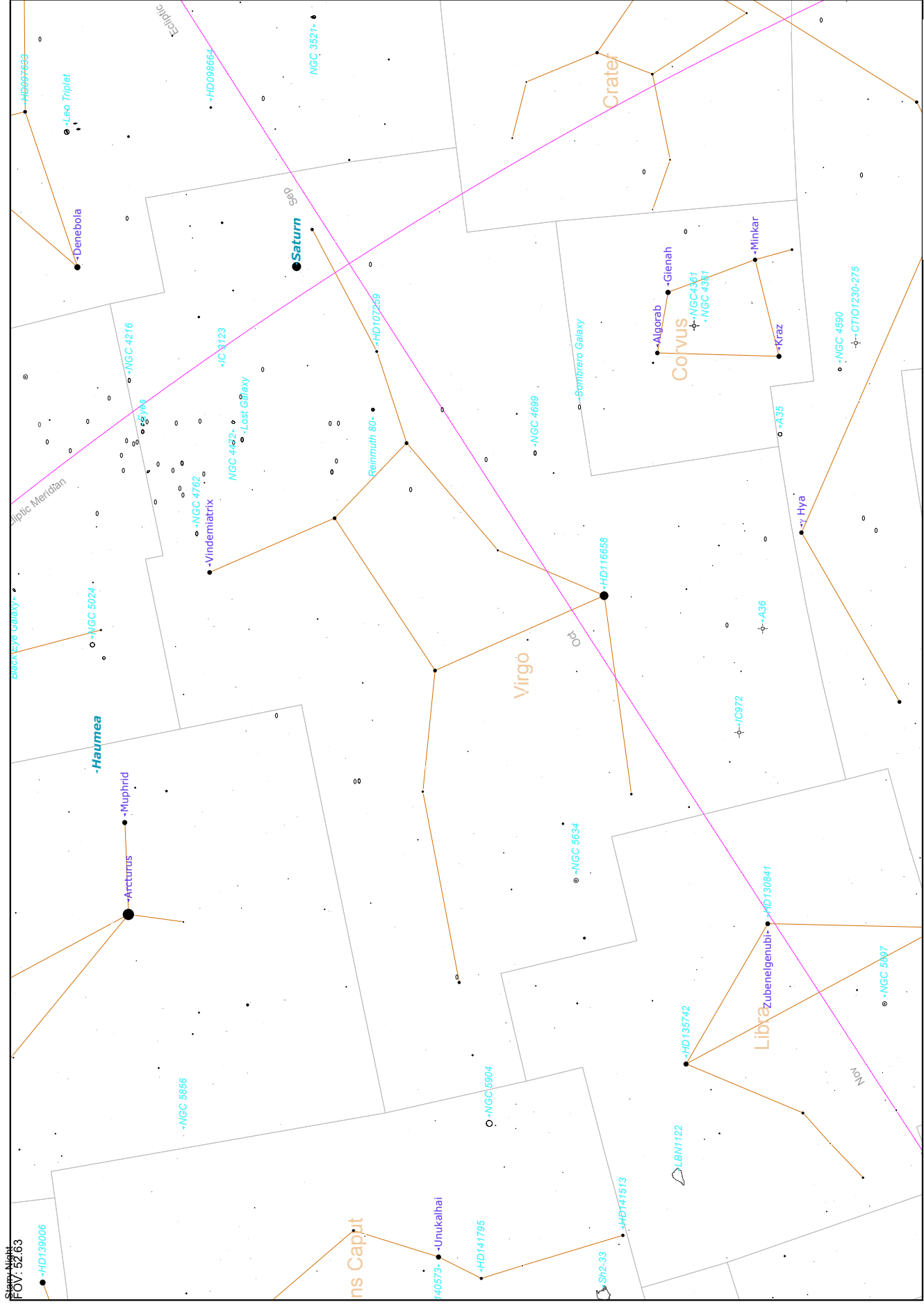
✓	Name	R.A.	Decl.	Details
	M49 (NGC 4472)	12hr 29.8m	+08° 00'	A mag 8.4 elliptical (E4) galaxy, 8.9 x 7.4 arc minutes across.
	M58 (NGC 4579)	12hr 37.7m	+11° 49'	A mag 9.8 Sb spiral galaxy, 5.4 x 4.4 arc minutes across.
	M59 (NGC 4621)	12hr 42.0m	+11° 39'	A mag 9.8 E3 elliptical galaxy, 5.1 x 3.4 arc minutes across.
	M60 (NGC 4649)	12hr 43.7m	+11° 33'	A mag 8.8 E1 elliptical galaxy, 7.2 x 6.2 arc minutes across. Located in the same low power field as M59. Look for NGC 4647 4 arc min. NW.
	M61 (NGC 4303)	12hr 21.9m	+04° 28'	A mag 9.7 face-on spiral, 6.0 x 5.5 arc minutes across.
	M84 <sup>1</sup> (NGC 4374)	12hr 25.1m	+12° 53'	A bright pair of elliptical galaxies (M84/86) in the heart of the Virgo cluster. Part of the "Markarian Chain". Mags 9.3 and 9.2. Sizes 5.0 x 4.4 and 7.4 x 5.5 arc min.
	M86 <sup>1</sup> (NGC 4406)	12hr 26.2m	+12° 57'	See M84.
	M87 (NGC 4486)	12hr 30.8m	+12° 24'	Another bright elliptical galaxy, mag 8.6., 7.2 x 6.8 arc min. One of the largest and most luminous know galaxies, also a strong radio and X-ray source.
	M89 (NGC 4552)	12hr 35.7m	+12° 33'	An E0 elliptical galaxy , 4.2 x 4.2 arc minutes, mag 9.8.
	M90 (NGC 4569)	12hr 36.8m	+13° 10'	A bright, Sb spiral galaxy. Mag 9.5, 9.5 x 4.7 arc minutes.
	M104 <sup>1</sup> (NGC 4594)	12hr 40.0m	-11° 37'	The "Sombrero Galaxy" - an Sb spiral galaxy. Mag 8.3, 8.9 x 4.1 arc minutes. Features a prominent dust lane, tilted almost edge-on.

## Big Scope Objects:

✓	Name	R.A.	Decl.	Details
	NGC 4216 <sup>1</sup>	12hr 15.9m	+13° 09'	A mag. 9.9 Sb spiral, 8.3x 2.2 arc min, almost edge-on. (110NGC)
	NGC 4388 <sup>1</sup>	12hr 25.8m	+12° 40'	A mag 11 Sb galaxy near M84/86. Mag 10.9, 5.1 x 1.4 arc min. (110NGC)
	NGC 4438 <sup>1</sup> and NGC 4435 <sup>1</sup>	12hr 27.8m	+13° 01'	"The Eyes" - an interacting pair. NGC 4438 is an mag. 10.1 spiral. 9.3 x 3.9 min. (110NGC)
	NGC 4517 <sup>1</sup>	12hr 32.8m	+00° 07'	An edge-on Sc spiral. Mag 10.5, 10.2 x 1.9 arc minutes. (110NGC)
	NGC 4526 <sup>1</sup>	12hr 34.0m	+07° 42'	A mag 9.6 E7 elliptical, 7.6 x 2.3 arc minutes. (110NGC)
	NGC 4535 <sup>1</sup>	12hr 34.3m	+08° 12'	A mag. 9.8 Sc spiral. 6.8 x 5.0 arc min, near M49. (110NGC)
	NGC 4567 <sup>1</sup> and NGC 4568 <sup>1</sup>	12hr 36.5m	+11° 15'	The "Siamese Twins" - a pair of interacting Sc spirals. Mag 11, 4.6 x 2.1 arc minutes. (110NGC)
	NGC 4699 <sup>1</sup>	12hr 49.0m	-08° 40'	A small bright Sa spiral, mag 9.6, 3.5 x 2.7 arc min. (110NGC)
	NGC 4762 <sup>1</sup>	12hr 52.9m	+11° 14'	The flattest galaxy known. A mag 10.2 SB0 spiral, 8.7 x 1.6 arc min. (110NGC)
	NGC 5746 <sup>1</sup>	14hr 44.9m	+01° 57'	Sb edge-on galaxy, mag 10.6, 7.9 x 1.7 arc minutes. (110NGC)

## Challenge Objects:

✓	Name	R.A.	Decl.	Details
	3C273	12hr 29.1m	+02° 03'	Appearing as a bluish 12th or 13th mag. variable "star", this quasar is some 2-3 billion light years away. Uranometria pg. 238



StarryNight  
FOV: 55.63

Viewing from Prince George, Canada  
Chart centre (J2000): RA: 13h 31m 26.7s Dec: -2° 37' 25"  
Altitude: 31° 43.309', Azimuth: 160° 19.050' (south)

Long: -122° 43' 42" Lat: 53° 55' 09"  
2010/04/30 11:00:00 PM (Local)  
Limiting Magnitude: 6.4

- Galaxy
- Star Cluster
- Variable
- Multiple
- Planetary
- Cluster
- Quasar