

NGC 3690 H247¹ Galaxy Type IBm pec
 ϕ $2.5' \times 2.1'$, m11.5v, SB13.1 $11^h28.5^m +58^\circ 33'$

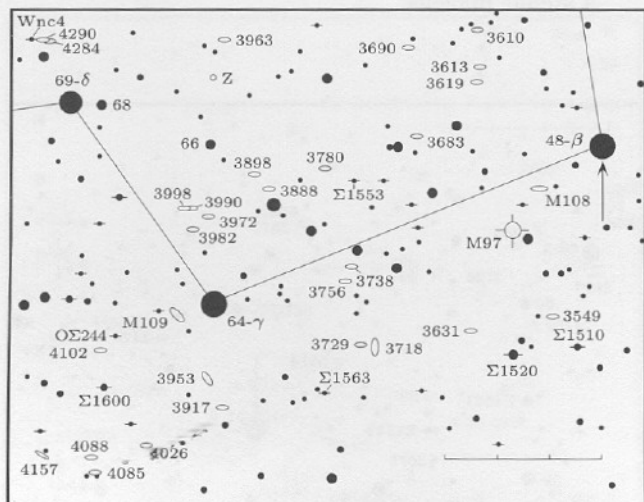
IC 694 Galaxy Type SBm?
 ϕ $1.2' \times 1.0'$, m11.3v, SB11.3 $11^h28.5^m +58^\circ 33'$
Finder Chart 62-8 ★★★/★★★

12/14" *Scopes-125x*: NGC 3690 and IC 694, located 3' north of a 10th magnitude star, are a pair of nearly merged interacting galaxies that appear as one object. The combined halo is a fairly bright $2' \times 1.25'$ E-W oval containing a bright bar-like core. The nuclei of the two galaxies are at opposite ends of the mottled core area: the eastern nucleus is a small knot but the western nucleus is merely stellar.

NGC 3718 H221¹ Galaxy Type SB(s)a pec
 ϕ $10.0' \times 4.7'$, m10.8v, SB14.8 $11^h32.6^m +53^\circ 04'$

NGC 3729 H222¹ Galaxy Type SB(r)a pec
 ϕ $3.1' \times 2.2'$, m11.4v, SB13.4 $11^h33.8^m +53^\circ 08'$
Finder Chart 62-10, Figure 62-30 ★★★/★★★

12/14" *Scopes-125x*: NGC 3718 and NGC 3729 are a 12' wide E-W pair of interacting galaxies. The western component, NGC 3718, has a uniformly faint halo elongated $4' \times 2.5'$ NNW-SSE: its core, however, is elongated NNE-SSW. The core contains a very faint stellar nucleus. 2.5' SSW of the nucleus, near the halo's edge, is a wide E-W pair of 11th magnitude stars. The eastern galaxy, NGC 3729, is only half the size of its companion. Its $2' \times 1.25'$ N-S halo contains a broad, weakly concentrated core. A faint star is nestled against its SSW edge.



Finder Chart 62-10. 48-β UMa: $11^h01.8^m +56^\circ 23'$

NGC 3726 H730² Galaxy Type SAB(r)c I-II
 ϕ $5.6' \times 3.8'$, m10.4v, SB13.6 $11^h33.3^m +47^\circ 02'$
Finder Chart 62-9, Figure 62-31 ★★★

8/10" *Scopes-100x*: NGC 3726 has a fairly bright $5' \times 3'$ N-S halo with an 11th magnitude star on its northern edge. The core is small, somewhat elongated N-S, and has a granular texture.

12/14" *Scopes-125x*: The large, diffuse $5.5' \times 3.5'$ N-S halo has, except for a faint stellar nucleus, uniform surface brightness.

20/22" *Scopes-175x*: Outstanding! NGC 3726 has a fairly bright N-S oval halo that contains a subtle clockwise spiral structure. The northern arm is short and indistinct. The southern arm has some knots and numerous tiny H-II regions and therefore is more prominent. At the galaxy's center is a small core with a faint bar aligned with the halo's N-S major axis.

NGC 3738 H783² Galaxy Type Im III-IV
 ϕ $3.2' \times 2.8'$, m11.7v, SB14.0 $11^h35.8^m +54^\circ 31'$
Finder Chart 62-10 ★★★

8/10" *Scopes-100x*: NGC 3738, located 30' NNW of a 6th magnitude star, has a fairly bright $1.25' \times 0.75'$ NW-SE halo that contains a slightly brighter center. A 10th magnitude star lies 2.5' NE, and an 11th magnitude star is 4' ENE of the galaxy's center.

16/18" *Scopes-150x*: NGC 3738 has a smooth $1.5' \times 0.75'$ NW-SE bar-shaped envelope with rounded ends. The NE long side of the envelope is arced, but the SW long side is more sharply-bordered. The galaxy's core is highly extended but weakly concentrated. A slightly brighter galactic knot or a superimposed star is on the galaxy's NW edge. Galaxy NGC 3756 lies 16' SE.

NGC 3756 H784² Galaxy Type SAB(rs)bc II
 ϕ $4.6' \times 2.3'$, m11.5v, SB13.9 $11^h36.8^m +54^\circ 18'$
Finder Chart 62-10 ★★★

8/10" *Scopes-100x*: NGC 3756, located 4' south of a 10th magnitude star, is a faint, smooth $3' \times 1.5'$ N-S glow without central brightening.

16/18" *Scopes-150x*: NGC 3756 is a low surface brightness galaxy with diffuse edges and a faint stellar nucleus embedded in a poorly concentrated, somewhat mottled core. Galaxy NGC 3738 lies 16' NW.

NGC 3769 H731² Galaxy Type SB(r)b: II-III
 ϕ $3.0' \times 0.9'$, m11.8v, SB12.7 $11^h37.7^m +47^\circ 54'$
Finder Chart 62-9 ★★★

8/10" *Scopes-100x*: NGC 3769, located in a star field barren even by off-Milky Way standards, is a faint $1.5' \times 0.5'$ NNW-SSE streak with a thin unconcentrated core along its major axis.

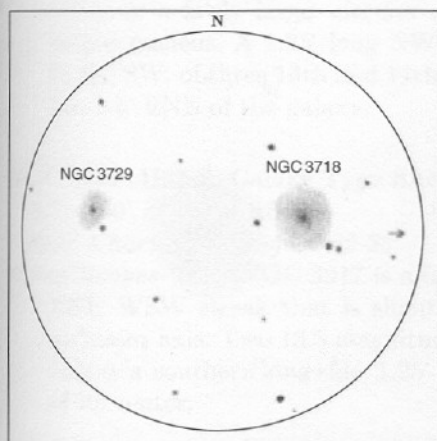


Figure 62-30. NGC 3718 and NGC 3729
13", f5.6–165x, by Steve Coe

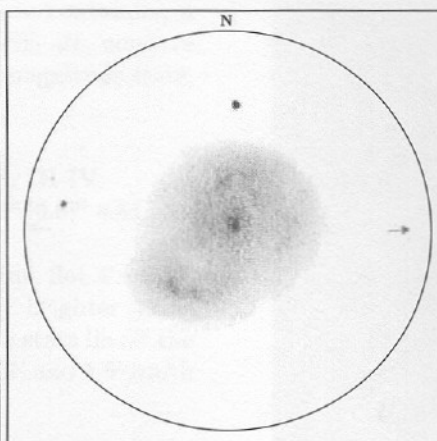


Figure 62-31. NGC 3726
20", f4.5–175x, by Richard W. Jakiel

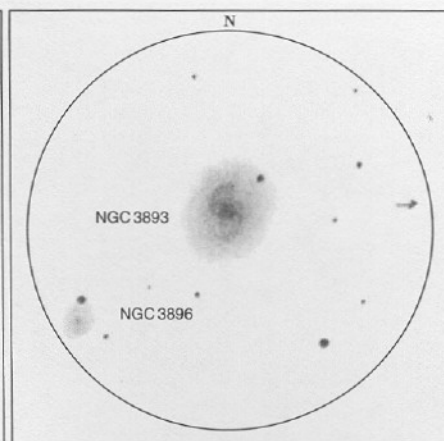


Figure 62-32. NGC 3893 and NGC 3896
20", f4.5–175x, by Richard W. Jakiel

16/18" *Scopes-150x*: With larger aperture, NGC 3769 appears more lens-shaped. Its $2' \times 0.75'$ NNW–SSE halo has a faint mottled texture and contains a faint core that runs nearly half the length of its major axis. A magnitude 13.5 star is $2'$ NE of the galaxy's center.

NGC 3782 H732² Galaxy Type SAB(s)cd: IV-V
 $\phi 1.3' \times 0.7'$, m12.4v, SB12.1 $11^{\text{h}}39.3^{\text{m}} +46^{\circ} 31'$
Finder Chart 62-9 ★★

12/14" *Scopes-125x*: NGC 3782 has a diffuse $1'$ diameter halo that contains a poorly concentrated core. Its faint patch lies near three 11th to 12th magnitude stars, the nearest of which actually touches the galaxy's SSW edge.

NGC 3780 H227¹ Galaxy Type SA(s)c: II-III
 $\phi 2.8' \times 2.3'$, m11.5v, SB13.3 $11^{\text{h}}39.4^{\text{m}} +56^{\circ} 16'$
Finder Chart 62-10 ★★★

8/10" *Scopes-100x*: NGC 3780 has a faint, diffuse $2.5' \times 2'$ NNE–SSW oval halo. $25'$ to the galaxy's WSW is the fine double $\Sigma 1553$, which consists of comparably bright magnitude 7.9 and 8.4 components separated by a comfortable $6''$.

16/18" *Scopes-150x*: NGC 3780 has a faint $3' \times 2.5'$ NNE–SSW halo that contains a faint core with a knot on its east side. A 13th magnitude star lies $2'$ ENE.

NGC 3813 H94¹ Galaxy Type SA(rs)b: III
 $\phi 1.9' \times 1.1'$, m11.7v, SB12.3 $11^{\text{h}}41.3^{\text{m}} +36^{\circ} 33'$
Finder Chart 62-11 ★★★

12/14" *Scopes-125x*: NGC 3813 appears fairly bright and much elongated $2.5' \times 0.75'$ E–W. A thin, moderately well concentrated core runs for $1'$ along the galaxy's major axis. 14th magnitude stars lie near

each tip of the halo, the star near the eastern tip being the closer.

NGC 3877 H201¹ Galaxy Type SA(s)c: II-III
 $\phi 5.1' \times 1.1'$, m11.0v, SB12.7 $11^{\text{h}}46.1^{\text{m}} +47^{\circ} 30'$
Finder Chart 62-12, Figure 62-33 ★★★★★

8/10" *Scopes-100x*: NGC 3877 is within an attractive star field that includes the bright magnitude 3.7 Chi (χ) Ursae Majoris $17'$ to its north. The galaxy has a moderately faint, highly elongated $4' \times 1'$ NE–SW halo containing a well concentrated central condensation.



Figure 62-33. Edge-on galaxy NGC 3877, located south of the bright star Chi (χ) Ursae Majoris, has a mottled halo around a faint stellar nucleus. Image courtesy Tim Hunter and James McGaha.

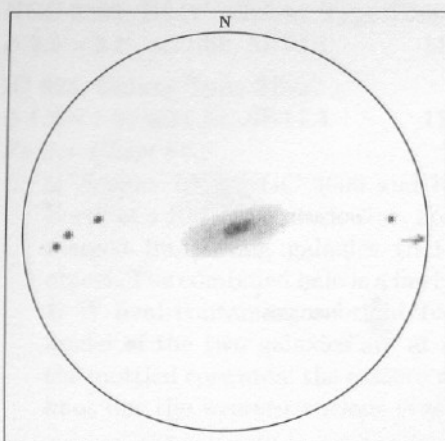


Figure 62-34. NGC 3898
17.5", f4.5-300x, by G. R. Kepple

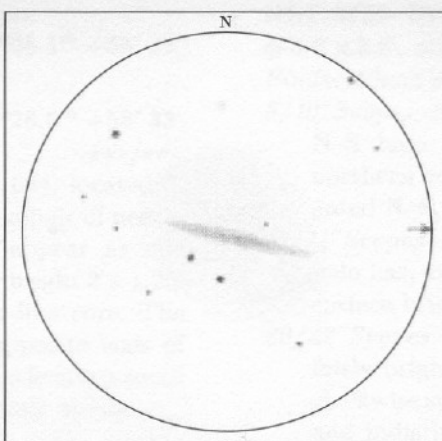


Figure 62-35. NGC 3917
18.5", f5-275x, by Glen W. Sanner

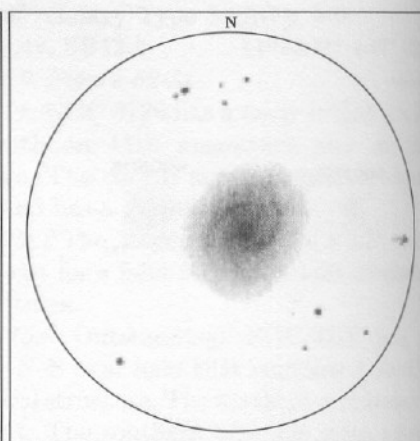
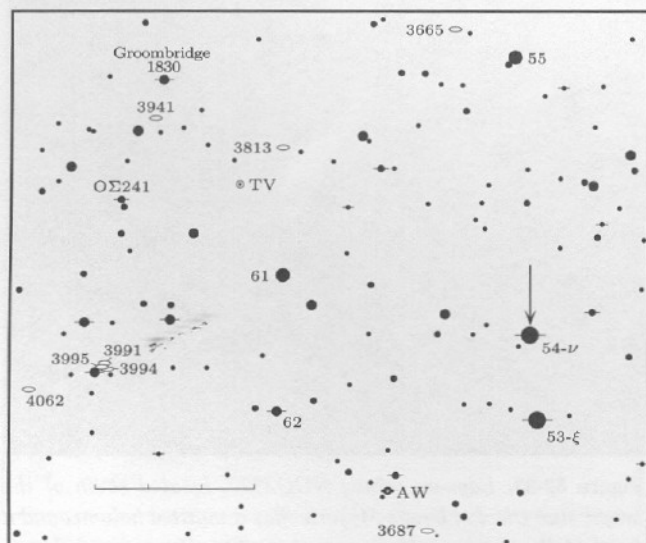


Figure 62-36. NGC 3938
17.5", f4.5-275x, by G. R. Kepple

16/18" *Scopes-150x*: In large telescopes NGC 3877 has a mottled $5' \times 1.25'$ envelope elongated in position angle 35° . The central portion contains a faint stellar nucleus surrounded by several nearly stellar beads. The envelope's NE tip nearly extends to the midpoint of the southern side of a $6'$ equilateral triangle of 11th to 12th magnitude stars.

NGC 3888 H785² Galaxy Type SAB(rs)c II
 $\phi 1.6' \times 1.3'$, m12.1v, SB12.8 $11^h 47.6^m + 55^\circ 58'$
Finder Chart 62-10 ★★★

12/14" *Scopes-125x*: NGC 3888 appears brighter than expected. Its well concentrated football-shaped halo is elongated $1.75' \times 1'$ ESE-WNW and contains a slightly brighter oval core with a indistinct nucleus. Five fairly bright stars NE and NW of the galaxy lie along two parallel rows.



Finder Chart 62-11. 54-ν UMa: $11^h 18.5^m + 33^\circ 06'$

NGC 3893 H738² Galaxy Type SAB(rs)c: I
 $\phi 4.2' \times 2.3'$, m10.5v, SB12.8 $11^h 48.6^m + 48^\circ 43'$

NGC 3896 H739² Galaxy Type SB0/a: pec
 $\phi 1.6' \times 0.9'$, m12.9v, SB13.1 $11^h 48.9^m + 48^\circ 41'$
Finder Chart 62-12, Figure 62-32 ★★★/★★

8/10" *Scopes-100x*: NGC 3893, located $3'$ NE of a 10th magnitude star, is a fairly bright $2.25' \times 1.5'$ NNW-SSE oval containing a round, prominent core. A 12.5 magnitude star touches the galaxy's NW edge.

16/18" *Scopes-150x*: NGC 3893 displays a mottled, unevenly bright halo elongated $3' \times 2'$ in position angle 165° . The core is bright and spotted but lacks a distinct nucleus. With averted vision vague spiral arms can be seen springing from the core's east and west edges and arcing in a clockwise direction out beyond the core's north and south points. The SW part of the halo is more distinct. $4'$ SE of NGC 3893 is its companion galaxy NGC 3986, a faint, circular $1'$ diameter glow with a 13th magnitude star touching its northern edge.

NGC 3898 H228¹ Galaxy Type SA(s)ab I-II
 $\phi 3.3' \times 1.9'$, m10.7v, SB12.5 $11^h 49.2^m + 56^\circ 05'$
Finder Chart 62-10, Figure 62-34 ★★★

8/10" *Scopes-100x*: NGC 3898, located within the Dipper's bowl north of the magnitude 2.4 Gamma (γ) = 64 Ursae Majoris, is the brighter and larger of a galaxy-pair with NGC 3888, lying $16'$ to its SW. NGC 3898 displays a bright stellar nucleus embedded in a well concentrated core surrounded by a much fainter $2.5' \times 1.25'$ ESE-WNW halo.

16/18" *Scopes-150x*: The halo is rather faint around its periphery, but with averted vision may be traced to $3.5' \times 1.5'$ ESE-WNW. The brightness rises sud-

denly to a fairly large, circular core containing a bright nucleus. A 1.25' long NW-SE arc, concave to the SW, of three 13th and 14th magnitude stars, lies 3.5' ENE of the galaxy.

NGC 3917 H824² Galaxy Type SAcd: III-IV

ϕ 4.7' \times 1.0', m11.8v, SB13.3 $11^{\text{h}}50.8^{\text{m}} +51^{\circ} 50'$

Finder Chart 62-10, Figure 62-35 ★★★

12/14" *Scopes-125x*: NGC 3917 is a faint, flat 4' \times 0.75' ENE-WSW streak that is slightly brighter along its major axis. Two 13.5 magnitude stars lie off the galaxy's southern long side, 1.25' SE and 1.5' south of its center.

NGC 3938 H203¹ Galaxy Type SA(s)c I

ϕ 4.9' \times 4.7', m10.4v, SB13.6 $11^{\text{h}}52.8^{\text{m}} +44^{\circ} 07'$

Finder Chart 62-12, Figure 62-36 ★★★

8/10" *Scopes-100x*: NGC 3938 has a rather faint, diffuse 3.5' \times 2.5' N-S halo that contains a small and inconspicuous core.

16/18" *Scopes-150x*: NGC 3938 remains only moderately bright in larger telescopes. Its large 4' \times 3' N-S halo has indistinct edges. Toward the interior the halo brightens slightly to a circular, somewhat mottled core that contains a faint stellar nucleus. With averted vision and 175x a vague counterclockwise spiral structure may just be glimpsed. A 13th magnitude star is on the halo's SW edge 2' from the galaxy's center.

NGC 3941 H173¹ Galaxy Type SB(s)0⁺

ϕ 3.7' \times 2.6', m10.3v, SB12.6 $11^{\text{h}}52.9^{\text{m}} +36^{\circ} 59'$

Finder Chart 62-11 ★★★★★

8/10" *Scopes-100x*: This galaxy has a fairly bright 2' \times 0.75' N-S oval halo containing a bright center.

16/18" *Scopes-150x*: NGC 3941 has a conspicuous oval core with a stellar nucleus surrounded by a well concentrated 3' \times 1.5' N-S halo. A 13th magnitude star lies 1.5' east.

NGC 3945 H251¹ Galaxy Type (R)SB(rs)0⁺

ϕ 5.9' \times 3.7', m10.8v, SB14.0 $11^{\text{h}}53.2^{\text{m}} +60^{\circ} 41'$

Finder Chart 62-8 ★★★

8/10" *Scopes-100x*: NGC 3945 exhibits a conspicuous core with a stellar nucleus, but the halo fades rapidly outward to extremely diffuse edges: its diameter might be around 2'. A 12th magnitude star near the halo's SW edge appears about as bright as the nucleus.

16/18" *Scopes-150x*: With larger aperture the very faint outer regions appear elongated 3' \times 2' E-W. The



Figure 62-37. NGC 3953 is a bright galaxy containing a prominent core with a stellar nucleus. Image courtesy of Bill Logan.

core is broad and well concentrated; but the nucleus does not stand out as much as in smaller telescopes. In addition to the 12th magnitude star, two 13th magnitude stars can be seen on the halo's south edge and 1.75' NW of the galaxy's center.

NGC 3949 H202¹ Galaxy Type SA(s)bc: III-IV

ϕ 2.6' \times 1.6', m11.1v, SB12.5 $11^{\text{h}}53.7^{\text{m}} +47^{\circ} 52'$

Finder Chart 62-12 ★★★★★

12/14" *Scopes-125x*: NGC 3949 is a moderately faint 2' \times 1.25' NW-SE oval containing a stellar nucleus. The core is not very well concentrated, but averted vision reveals that it has a mottled texture and faint patches. 13th magnitude stars are 3.5' SW and 4' NW.

NGC 3953 H45⁵ Galaxy Type SB(r)bc I-II

ϕ 6.0' \times 3.2', m10.1v, SB13.1 $11^{\text{h}}53.8^{\text{m}} +52^{\circ} 20'$

Finder Chart 62-10, Figure 62-37 ★★★★★

8/10" *Scopes-100x*: This bright galaxy is just west of a N-S string of widely and rather evenly spaced 10th and 11th magnitude stars. A N-S pair of 10.5 magnitude stars due north of the galaxy forms a thin isosceles triangle with the northernmost star in the string. The galaxy's 5' \times 2.5' N-S halo contains a bright circular core with a stellar nucleus.

16/18" *Scopes-150x*: NGC 3953 is a fine object for this aperture range. Its 6' \times 3' NNE-SSW halo contains a broadly concentrated central region displaying mottled texture in and around the bright oval core. A 14th magnitude star touches the halo's western

flank 1' NE of the galaxy's center, and a 12.5 magnitude star lies 3' to the galaxy's ENE.

NGC 3963 H67⁴ Galaxy Type SAB(rs)bc I-II
 ϕ 2.7' \times 2.5', m11.9v, SB13.8 $11^{\text{h}}55.0^{\text{m}} +58^{\circ}30'$
Finder Chart 62-10 ★★

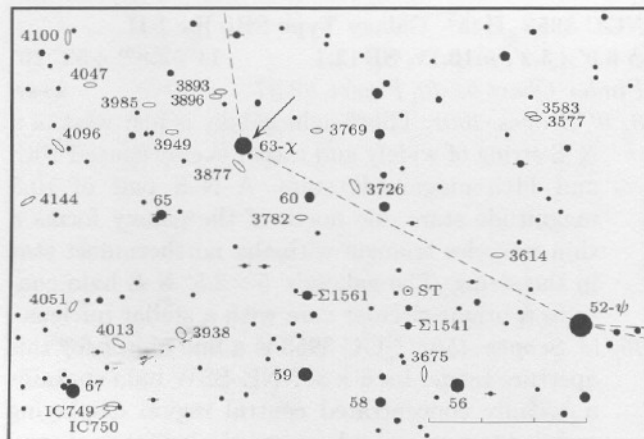
12/14" *Scopes-125x*: NGC 3963 has a faint 2' \times 1.5' NW-SE halo containing a very slightly brighter central region mottled with a mixture of dark areas and indistinct bright knots. Along the halo's southern edge is a row of three faint stars, the two westernmost touching the halo's edge. 8' SSW of NGC 3963 is galaxy NGC 3958, a faint 1' \times 0.5' NNE-SSW oval containing a stellar nucleus.

NGC 3982 H62⁴ Galaxy Type SAB(r)b: III
 ϕ 2.2' \times 2.0', m11.0v, SB12.4 $11^{\text{h}}56.5^{\text{m}} +55^{\circ}08'$
Finder Chart 62-10 ★★★

12/14" *Scopes-125x*: NGC 3982, located 3.5' NNE of two 12th magnitude stars, is a fairly bright galaxy with a prominent 30" core embedded in a 1.75' diameter, slightly elongated N-S, halo. 175x reveals a mottled central area containing a faint nonstellar nucleus.

NGC 3985 H707³ Galaxy Type SB(s)m:
 ϕ 1.0' \times 0.6', m12.6v, SB11.9 $11^{\text{h}}56.7^{\text{m}} +48^{\circ}20'$
Finder Chart 62-12 ★★

12/14" *Scopes-125x*: NGC 3985 is a moderately faint, diffuse glow slightly elongated 45" \times 30" ENE-WSW and containing a tiny dim core. A 14th magnitude star lies 2.5' SE.



Finder Chart 62-12. 63- χ UMa: $11^{\text{h}}46.0^{\text{m}} +47^{\circ}47'$

NGC 3990 H791² Galaxy Type S0: sp
 ϕ 1.4' \times 0.8', m12.6v, SB12.5 $11^{\text{h}}57.6^{\text{m}} +55^{\circ}28'$

NGC 3998 H229¹ Galaxy Type SAB(r)b: III
 ϕ 3.0' \times 2.6', m10.6v, SB12.7 $11^{\text{h}}57.9^{\text{m}} +55^{\circ}27'$
Finder Chart 62-10, Figure 62-39 ★★/★★★

12/14" *Scopes-125x*: NGC 3990 and NGC 3998 are a 3' wide E-W galaxy pair. NGC 3998, the eastern component, is by far the larger and the brighter of the two: its prominent stellar nucleus is embedded in the faint 2' \times 1.5' NW-SE oval halo. NGC 3990, the western galaxy, also has a bright nucleus but its faint halo is extended only 45" \times 25" NE-SW. A 9th magnitude star lies 5.5' NW, and a 10th magnitude star is 4.5' SSW, of NGC 3998.

NGC 3991 Galaxy Type Im pec sp
 ϕ 1.3' \times 0.3', m13.1v, SB11.9 $11^{\text{h}}57.5^{\text{m}} +32^{\circ}20'$

NGC 3994 Galaxy Type SA(r)c pec?
 ϕ 1.0' \times 0.6', m12.7v, SB12.0 $11^{\text{h}}57.6^{\text{m}} +32^{\circ}17'$

NGC 3995 Galaxy Type SAm pec III-IV
 ϕ 2.6' \times 0.9', m12.4v, SB13.2 $11^{\text{h}}57.7^{\text{m}} +32^{\circ}18'$
Finder Chart 62-11, Figure 62-40 ★★/★★/★★

16/18" *Scopes-150x*: NGC 3991, NGC 3994, and NGC 3995 are a trio of interacting galaxies WNW of a bright 6th magnitude field star. NGC 3995, located 5' from the star, is the brightest of the three galaxies and has a much-elongated 2' \times 0.5' NE-SW spindle-shaped halo containing a somewhat mottled core extended along its major axis. NGC 3991, located 3.75' NW of NGC 3995, is also quite elongated: its 1' \times 0.25' NE-SW halo contains an extended bright core with a stellar nucleus. The southernmost galaxy of the three, NGC 3994, is 2' SW of NGC 3995 and has a small, faint 1' \times 0.5' N-S oval halo that contains a stellar nucleus.

NGC 3992 Messier 109 Galaxy Type SB(rs)bc I
 ϕ 7.6' \times 4.3', m9.8v, SB13.5 $11^{\text{h}}57.6^{\text{m}} +53^{\circ}23'$
Finder Chart 62-10, Figure 62-38 ★★★★★

Although viewed by Messier, M109 was not added to his catalogue until the twentieth century. It was discovered by Mechain sometime in 1781 or 1782. M109 is around 46 million light years distant. Its absolute magnitude is about -20.9, a luminosity of 19 billion suns, and its true diameter is in excess of 100,000 light years. 8/10" *Scopes-100x*: Messier 109 lies within a NE pointing isosceles triangle of five unequally bright stars. The northern side of the triangle consists of one 11th and three 12.5 magnitude stars. The brightest member of the triangle, a 10th magnitude object, is at its SW corner 5' from the galaxy's core. M109

has a faint, diffuse $6' \times 3.5'$ ENE–WSW halo that contains a small bright core.

16/18" Scopes–150x: The fairly low surface brightness halo is elongated $7.5' \times 5'$ ENE–WSW, its SW tip pointing toward a 10th magnitude star $5'$ distant. The inner halo is mottled and surrounds an irregularly bright oval core. An ENE–WSW string of one 11th and three 12.5 magnitude stars passes through the northern part of the galaxy's halo: two of the magnitude 12.5 stars lie near the halo's tips and the third is superimposed upon the halo $1'$ north of the galaxy's core.

NGC 4013 Galaxy Type Sb III

$\phi 4.7' \times 1.0'$, m11.2v, SB12.8 $11^h58.5^m +43^\circ 57'$
Finder Chart 62-12, Figure 62-41 ★★★

12/14" Scopes–125x: NGC 4013 has a moderately faint, thin halo elongated $4' \times 0.5'$ ENE–WSW. With averted vision and 200x a dark dust lane might be glimpsed. A magnitude 12.5 star is superimposed upon the halo just NE of the galaxy's center and at low power might be mistaken for the nucleus: however, the real nucleus, if potentially visible, is drowned out in the glare of the star.

IC 749 Galaxy Type SAB(rs) cd III

$\phi 2.3' \times 1.9'$, m12.4v, SB13.8 $11^h58.6^m +42^\circ 44'$

IC 750 Galaxy Type Sab: sp

$\phi 2.8' \times 1.4'$, m11.9v, SB13.3 $11^h58.9^m +42^\circ 43'$

Finder Chart 62-12, Figure 62-42 ★★/★★★

8/10" Scopes–100x: IC 749 and IC 750 are a $3'$ wide NW–SE galaxy pair near a magnitude 8.5 field star. The eastern system, IC 750, is located $5.5'$ ENE of the star: it is the larger and brighter of the two galaxies, and has a thin $1.5' \times 0.5'$ NE–SW halo that is elongated to tapered ends and contains a small, bright oval core. IC 749, located $3'$ NE of the magnitude 8.5 star, is a very faint, round featureless glow. A 9th magnitude star lies $4'$ SSE of IC750.

16/18" Scopes–150x: IC750 has a fairly bright $2' \times 0.75'$ halo that contains a brighter granular center. The increase in aperture does little to improve IC749: it remains a diffuse haze with a slight brightening at its center.

NGC 4026 H223¹ Galaxy Type S0

$\phi 4.6' \times 1.2'$, m10.8v, SB12.5 $11^h59.4^m +50^\circ 58'$

Finder Chart 62-10, Figure 62-43 ★★★

8/10" Scopes–100x: NGC 4026, located $7'$ SSW of a 9th



Figure 62-38. Messier 109 (NGC 3992) displays a bright core surrounded by a large, faint, diffuse halo. Image courtesy of Jim Burnell.

magnitude star, is a bright $3.5' \times 0.75'$ N–S streak containing an oval core.

16/18" Scopes–150x: This galaxy displays a sharply concentrated core containing a bright nonstellar nucleus. The surrounding envelope appears to be a $3' \times 0.75'$ N–S spindle, but close inspection reveals that its very faint extensions reach a length of $4'$.

NGC 4036 H253¹ Galaxy Type S0

$\phi 3.8' \times 1.9'$, m10.7v, SB12.7 $12^h01.4^m +61^\circ 54'$

Finder Chart 62-8 ★★★★★

8/10" Scopes–100x: NGC 4036 lies within a keystone of 10th magnitude stars that is located $0.5'$ NE of a row of three 6th to 7th magnitude stars. The galaxy has a bright $2.5' \times 1'$ E–W halo that contains an oval core with a stellar nucleus.

16/18" Scopes–150x: This fine spindle-shaped galaxy has a bright $3.5' \times 1.25'$ E–W halo containing a well concentrated core with a bright stellar nucleus. Averted vision reveals the thin dark dust lane that runs just south of the core.

NGC 4041 H252¹ Galaxy Type SA(rs)bc: II-III

$\phi 2.6' \times 2.6'$, m11.3v, SB13.2 $12^h02.2^m +62^\circ 08'$

Finder Chart 62-8, Figure 62-44 ★★★

8/10" Scopes–100x: NGC 4041, located in a field of faint stars, has a bright, circular $1.5'$ diameter halo containing a broad central brightening.