

## AGC 426 - Observing Notes

Here is what I have on Abell 426 = Perseus galaxy cluster, a rich hunting ground for moderate to large sized scopes. There are a total of 58 galaxies included; all objects were surveyed with my 17.5", but there are some earlier observations with a 13.1" and 8" scopes. These were all made with mag 6.5 or better limiting mag skies at 220x for the 17.5", 166x with the 13" and 100x with the 8".--Steve Gottlieb

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N1224

03 11.2 +41 22

17.5: very faint, very small, round, small brighter core. Member of Abell 426.

U02598

03 14.1 +41 18

17.5: very faint, small, oval SW-NE, even surface brightness. Located 14'

WNW of N1250 within Abell 426.

U02608

03 15.0 +42 02

17.5: fairly faint, small, slightly elongated. Member of Abell 426.

Nearby are U02612 4.1' SE, U02618 11.3' ENE.

U02612

03 15.2 +41 59

17.5: very faint, very small, round, stellar nucleus or star superimposed.

A mag 13.5 star is 0.8' N. Located 4.1' SE of U02608 within Abell 426.

Z540-067

03 15.3 +41 37

17.5: extremely faint, very small, round. This member of Abell 426 is located 3.0' E of mag 8.9 SAO 38677.

N1250

03 15.4 +41 21

17.5: fairly faint, fairly small, slightly elongated NNW-SSE, bright core, faint almost stellar nucleus. Member of Abell 426.

U02618

03 16.0 +42 04

17.5: extremely faint, small, very elongated ~N-S, low even surface brightness. Located 11.3' ENE of U02608 within Abell 426.

IC0309

03 16.1 +40 48

17.5: faint, small, round, even surface brightness, situated between two mag 12 stars 1' NW and 1.4' SE. U02617 5' NNW not seen. Member of Abell 426.

U02619

03 16.3 +41 11

17.5: very faint, small, round. A mag 14 star is at the S edge and a mag 15 star is superimposed. Located 11.7' SW of IC 310 within Abell 426.

Appears brighter than UGC magnitude but is not listed in CGCG or MCG.

N1257

03 16.4 +41 32

17.5: faint, small, very elongated SW-NE, bright core. A mag 11 star is attached at the NE end 0.4' from center which detracts from viewing.

Member of Abell 426. Very uncertain RNGC identification.

Z540-074

03 16.5 +41 38

17.5: very faint, small, very diffuse, low surface brightness. Located 6'

N of U02621 = (R)N1257 (and attached star) within galaxy cluster Abell 426.

Z540.079 lies 5' E.

IC0310

03 16.7 +41 19

17.5: fairly faint, fairly small, round, small bright core, faint stellar nucleus. Forms a pair with U02626 = (R)N1259 in Abell 426.

U02626

03 17.0 +41 21

17.5: extremely faint, extremely small, pair of stars close NE. Located 3.7' NE of IC 310 within Abell 426. Incorrect identification in RNGC.

Z540-079

03 17.1 +41 38

17.5: very faint, very small, round. A mag 14 star is at the S end. Forms a pair with an anonymous galaxy = CR 9 2' NE within Abell 426.

Cr 9

03 17.2 +41 39

17.5: very faint, small, elongated E-W. A mag 13 star is 2' E. Located 3' NE of Z540-079 within Abell 426. Not listed in CGCG and MCG.

N1259

03 17.3 +41 23

17.5: extremely faint, very small. An extremely faint mag 15.5 star is at the W edge. Located 3.7' NE of U02626 = (R)N1259. First of three with N1260 and M+07-07-48 within Abell 426. Incorrect identification in the RNGC.

M+07-07-048

03 17.5 +41 22

17.5: extremely faint, very small, slightly elongated. Follows three stars by 1'. Located 2' ESE of N1259 and 2' S of N1260 within Abell 426.

N1260

03 17.5 +41 24

17.5: fairly faint, fairly small, oval ~E-W, weak concentration. This member of Abell 426 is the brightest of three with N1259 2.2' SW.

U02639

03 17.8 +41 58

17.5: extremely faint, small, edge-on streak E-W. A mag 13 star is 1.1' N of center. (R)N1265 lies 8' SE. Member of Abell 426.

Cr 16

03 17.9 +41 30

17.5: extremely faint, extremely small. Located 1' W of a faint double star and 1.4' SSW of N1264 within Abell 426. Visible only momentarily with averted vision.

Z540-085

03 17.9 +41 27

17.5: very faint, extremely small, round, even surface brightness. Three stars forming a right triangle are 2'-3' W. Member of Abell 426. Identified as N1264 in the RNGC.

N1264

03 18.0 +41 31

17.5: very faint, small, round, low surface brightness. An extremely faint companion is 1.5' SSW. Member of Abell 426. Incorrect identification in the RNGC.

IC0312

03 18.1 +41 45

17.5: faint, small, oval NW-SE, bright core. A mag 13 star is 1.2' E of center. Forms a pair with an anonymous companion 1.9' SE within Abell 426.

Anon

03 18.2 +41 43

17.5: very faint, very small, elongated SW-NE. A mag 15 star is off the NE edge. Located 2' SE of IC 312 within Abell 426.

Cr 19

03 18.3 +41 28

17.5: extremely faint, extremely small. Forms a very small triangle with a mag 13.5 star less than 1' W and a mag 15 star less than 1' S. Cr 21 close SE not seen. Member of Abell 426.

N1265

03 18.3 +41 51

17.5: very faint, small, round glow. This member of the Abell 426 cluster is located just E of a mag 11 star and has a striking location. Forms a pair with IC 312 6' SSW.

Z540-087

03 18.4 +41 25

17.5: faint, small, slightly elongated ~N-S. A mag 13.5 star is 0.8' N of center. Member of Abell 426.

Z540-089

03 18.6 +41 28

17.5: extremely faint, extremely small, round. Two mag 14 stars are close S just 16" and 32" from the center. Located 1.8' NW of N1267 and 1.8' SW of N1268 in Abell 426.

13: extremely faint, at visual threshold, very small, very faint star at S edge. Located 2' W of N1267/N1268 and first of four with N1270.

N1267

03 18.7 +41 28

17.5: faint, very small, round, faint stellar nucleus. Forms a close pair with N1268 1.0' N with Z540-089 1.8' NW and N1270 2.6' E. Located in the rich central section of Abell 426 with N1272 7.0' ENE and N1275 12.2' ENE.

13: very faint, small, compact, arc of stars just S. In a group of 4 in Abell 426.

N1268

03 18.7 +41 29

17.5: extremely faint, extremely small, round, faint stellar nucleus. Forms a close pair with N1267 1.2' S. Also very near are Z540-089 1.8' SW and N1270 is 2.7' ESE. Located in the central core of Abell 426 with N1272 6.8' E.

13: extremely faint, very small, diffuse. Located 1' N of N1267 in Abell 426.

#### N1270

03 19.0 +41 28

17.5: faint, very small, slightly elongated ~N-S, small bright core.

Located in the central core of Abell 426 with N1267 2.6' W, N1268 2.7' WNW and N1272 4.4' ENE.

13: faint, small, weak concentration. Last of four in a small group in the core of Abell 426 with N1267 2.5' W.

#### N1271

03 19.2 +41 21

17.5: very faint, small, slightly elongated, bright core, faint stellar nucleus. Member of Abell 426.

#### N1272

03 19.4 +41 30

17.5: fairly faint, small, round, small bright core. This galaxy is the second brightest in Abell 426 and forms the SW vertex of a distinctive parallelogram of brighter galaxies with N1275 5' ENE, N1273 3.1' NNE and N1278/1277 7.5' NE. Also located midway between N1275 and N1270 4.4' WSW.

13: fairly faint, fairly small, bright core.



8: extremely faint, extremely small, round.

N1273

03 19.5 +41 32

17.5: faint, very small, round, small bright core. Forms the NW vertex of a parallelogram of brighter galaxies in the core of Abell 426 with N1272 3.1' SSW, N1275 4.4' ESE, and N1278 5.3' ENE.

13: faint, small. Located 4.4' WNW of N1275 in the core of Abell 426.

M+07-07-061

03 19.6 +41 35

17.5: very faint, small, round. There is a small triangle of stars just S. Located in the central core of Abell 426 2.8' NNE of N1273 and 4.5' NW of N1275. Identified as IC 1907 in RC3 and PGC.

N1274

03 19.7 +41 33

17.5: faint, very small, weak concentration, slightly elongated. Located in the dense central core of Abell 426 just 2.7' NW of N1275 and 2.6' E of N1273.

13: very faint, very small, 2.7' NW of N1275, Abell 426.

Cr 35

03 19.8 +41 17

17.5: extremely faint, very small, slightly elongated. Located close W of a mag 13.5 star. First of three with U02673 and Cr 39. Member of Abell 426.

Cr 36

03 19.8 +41 36

17.5: very faint, very small, oval. Located in the central core of Abell 426 on a line with N1277 and N1278 2' SE. This gx is identified as N1276 in RNGC although the NGC identification is uncertain.

N1275

03 19.8 +41 31

17.5: fairly bright, fairly small, oval ~E-W, small bright core. Largest and brightest in the core of Abell 426. Surrounded by a swarm of faint galaxies including N1272 5.2' WSW, N1273 4.4' WNW, N1274 2.6' NW, N1277 3.7' NNE, N1278 3.3' NNW, N1279 2.8' SE, N1281 7.8' NNE.

13: fairly bright, fairly small, small bright core.

8: extremely faint, extremely small, round. Similar with 6" mask on 17.5".

Cr 39

03 19.9 +41 18

17.5: extremely faint, very small, slightly elongated. A mag 15 star is just 30" NW. Forms a trio with U02673 and Cr 35. Located 4' NW of U02673 within Abell 426.

#### N1277

03 19.9 +41 34

17.5: faint, very small, oval ~E-W, small bright core. Located in the central core of Abell 426 3.7' N of N1275 and forms a close pair with N1278 0.8' SE.

13: very faint, extremely small. Located 0.8' NW of N1278.

#### N1278

03 19.9 +41 34

17.5: fairly faint, fairly small, oval, small bright core. Located in the central core of Abell 426. Forms a close pair with N1277 0.8' NW. Located at the NE corner of a parallelogram with N1275 3.4' SSW, N1272 7.5' SW and N1273 5.3' WSW.

13: faint, small. Located 3.4' N of N1275 and forms a close pair with N1277.

#### Anon

03 20.0 +41 33

17.5: extremely faint, extremely small, round. Located in the core of Abell 426 1.4' ESE of N1277 and 3.4' NE of N1275. This galaxy is not

listed in any catalogue.

U02673

03 20.0 +41 15

17.5: very faint, very small, round, weak concentration. Located 1' SW of a double star 12/13 with a separation of 30". Forms a trio with Cr 35 and Cr 39 within Abell 426.

13: very faint, very small. A mag 12 double star is close NE. Located 7.4' SSW of N1282.

N1279

03 20.1 +41 28

17.5: very faint, very small, slightly elongated ~N-S, visible continuously with averted. Located in the central core of Abell 426 just 2.8' SE of N1275! Not listed in MCG, CGCG or RC3 and incorrectly identified in PGC.

13: extremely faint, very small, near visual threshold. Located 2.8' SE of N1275.

N1281

03 20.1 +41 38

17.5: faint, small, elongated WSW-ENE. Located in the central core of Abell 426 1.0' NE of a mag 10 star. N1275 lies 7.8' SSW.

N1282

03 20.2 +41 22

17.5: faint, fairly small, oval SW-NE, bright core. Forms a pair with

N1283 2' NNE in the core of Abell 426. N1275 lies 10' NW.

13: faint, fairly small, diffuse halo, 10' SE N1275. Forms a pair with N1283.

N1283

03 20.3 +41 24

17.5: very faint, small, slightly elongated. Forms the S vertex of an

isosceles triangle with a mag 13.5 star 1' N and a mag 14 star 1' NNW.

This member of Abell 426 forms a pair with N1282 2' SSW.

IC0313

03 21.0 +41 54

17.5: very faint, very small, almost round. A mag 14 star is off the SE

edge 30" from center. Forms a pair with IC 316 4.5' NE within Abell 426.

IC0316

03 21.3 +41 56

17.5: faint, small, oval ~N-S, weak concentration. Located 5' ENE of IC

313 in Abell 426. A companion is superimposed 0.2' S which was not seen.

Z540-113

03 21.3 +41 28

17.5: very faint, extremely small, oval E-W. A mag 14 star is 30" S.

Located 3.5' SW of Z540-115 within Abell 426.

Z540-115

03 21.5 +41 30

17.5: very faint, very small, very elongated NW-SE. Located 7' N of N1293

in Abell 426. Forms a pair with Z540-113 3.5' SW.

N1293

03 21.6 +41 24

17.5: faint, small, round, faint stellar nucleus. Forms a pair with N1294

2' SSE. Member of Abell 426.

N1294

03 21.7 +41 22

17.5: faint, small, round, small bright core. Forms a pair with N1292 2'

NNW. \_Member of Abell 426.

U02698

03 22.1 +40 52

17.5: faint, very small, round. Located 44" WSW of a mag 10 star which detracts from viewing. Member of Abell 426.

M+07-08-013

03 29.2 +41 23

17.5: very faint, very small, round. Two mag 15 stars are involved at the W end and just off the NW end which confuse the observation. N1335 lies 19' NE. This galaxy is a possible outlying member of Abell 426. Incorrectly identified in the RNGC as N1330 which doesn't exist at Stephan's position.

#### N1334

03 30.0 +41 50

17.5: faint, fairly small, elongated 5:2 WNW-ESE, bright core. A mag 13.5 star is just off the WNW tip. An extremely faint stellar nucleus seen for moments. N1335 lies 16' SSE. This is a possible outlying member of Abell 426.

#### N1335

03 30.3 +41 34

17.5: very faint, very small, round, an extremely faint star is possibly involved, can just hold steadily with averted. Located 4' N of mag 8.5 SAO 38888. N1336 lies 16' NNW. Possible outlying member of Abell 426.