

Determining the nature, size and age of the Universe

Appendix C: Galaxy Information Cards

The information on the cards includes:

- **Galaxy Name** – This is one of the names that astronomers use when referring to this object. It is by no means the only possible name for the object, but may be the most common name.
- **Other Names** – These are just a few of the other names used for this galaxy. For these information cards, we have limited this information to names that are either pronounceable as a word (or words), such as the Sombrero Galaxy, or from the following catalogs:
 - **Messier** – the Messier catalog is one of the most famous, and objects are named with an 'M' followed by the number of the object as counted in the catalog.
 - **New General Catalogue** – this is another famous catalogue of galaxies. The objects are named with an 'NGC' followed by the number of the object from the catalog.
 - **Morphological Catalogue of Galaxies** – this is a less famous catalog, at least among non-astronomers, but most of the galaxies here are listed in this catalog. The objects are named with an 'MCG' followed by a series of numbers which correspond to the way the data was organized for the catalog.
- **Position** – The position in the sky given as the Right Ascension and Declination. This is one of many ways that astronomers pinpoint objects in the sky, but is the most familiar for amateur astronomers and optical astronomers.
- **Redshift** – This is the measured redshift of light from the galaxy, along with the uncertainty in that measurement.
- **Radial Velocity** – The measured velocity of the galaxy toward (indicated by a minus sign) or away (indicated by a plus sign) from us.

The information for these cards was taken from the NASA/IPAC Extragalactic Database (NED). NED is a database used by professional astronomers to look up information and articles about extragalactic sources. We encourage you and your students to look up some of the galaxies for yourselves in this database at <http://nedwww.ipac.caltech.edu/>.

M 31

Other names	Andromeda NGC 224
Position RA: Dec:	01h 42.7m 41° 16'
Redshift	-0.001001 ± 0.000013
Radial Velocity	-300 ± 4 km/s

M 33

Other names	NGC 598 Triangulum Galaxy
Position RA: Dec:	01h 33.8m 30° 39'
Redshift	-0.000597 ± 0.000010
Radial Velocity	-179 ± 3 km/s

M 51

Other names	Whirlpool Galaxy Question Mark Galaxy
Position RA: Dec:	13h 29.9m 47° 12'
Redshift	0.002000
Radial Velocity	600 km/s

M 58

Other names	NGC 4579 MCG +2 -32-160
Position RA: Dec:	12h 37.7m 11° 49'
Redshift	0.005067 ± 0.000020
Radial Velocity	1519 ± 6 km/s

M 65

Other names	NGC 3623 MCG +2-29-018
Position RA: Dec:	11h 18.8m 13° 5.7'
Redshift	0.002692 ± 0.000010
Radial Velocity	807 ± 3 km/s

M 81

Other names	NGC 3031
Position RA: Dec:	09h 55.6m 69° 4'
Redshift	-0.000113 ± 0.000013
Radial Velocity	-34 ± 4 km/s

M 96

Other names	NGC 3368 MCG +02-28-006
Position RA: Dec:	10h 46.8m 11° 49'
Redshift	0.002992 ± 0.000013
Radial Velocity	897 ± 4 km/s

M 101

Other names	M 102 NGC 5457
Position RA: Dec:	14h 3.2m 54° 21'
Redshift	0.000804 ± 0.000007
Radial Velocity	241 ± 2 km/s

M 104

Other names	Sombrero NGC 4594
Position RA: Dec:	12h 40m -11° 37'
Redshift	0.003416 ± 0.000017
Radial Velocity	1024 ± 5 km/s

M 106

Other names	NGC 4258 MCG +8-22-104
Position RA: Dec:	12h 18m 47° 25.3'
Redshift	0.001494 ± 0.000010
Radial Velocity	448 ± 3 km/s

M 109

Other names	NGC 3992 MCG +9-20-044
Position RA: Dec:	11h 57.7m 53° 22'
Redshift	0.003496 ± 0.000004
Radial Velocity	1048 ± 1 km/s

NGC 253

Other names	Sculptor Galaxy Silver Coin Galaxy
Position RA: Dec:	00 h 47.7 m -25° 16'
Redshift	0.000811 ± 0.000007
Radial Velocity	243 ± 2 km/s

NGC 891

Other names	MCG +7-05-046
Position RA: Dec:	02h 22.6m 42° 21'
Redshift	0.001761 ± 0.000013
Radial Velocity	528 ± 4 km/s

NGC 2300

Other names	MCG +14-04-031
Position RA: Dec:	07h 32.3m 85° 42.5'
Redshift	0.006354 ± 0.000023
Radial Velocity	1905 ± 7 km/s

NGC 2543

Other names	MCG +6-18-014
Position RA: Dec:	08h 13m 36° 16'
Redshift	0.008242 ± 0.000030
Radial Velocity	2471 ± 9 km/s

NGC 2903

Other names	NGC 2905 MCG +4-32-009
Position RA: Dec:	09h 32.2m 21° 30'
Redshift	0.001855 ± 0.000004
Radial Velocity	556 ± 1 km/s

NGC 4013

Other names	MCG +7-25-009
Position RA: Dec:	11h 58.5m 43° 57'
Redshift	0.002773 ± 0.000002
Radial Velocity	831 ± 1 km/s

NGC 4124

Other names	NGC 4119 MCG +02-31-036
Position RA: Dec:	12h 8.1m 10° 22.7'
Redshift	0.005601 ± 0.000063
Radial Velocity	1679 ± 19 km/s

NGC 4565

Other names	MCG +4-30-006
Position RA: Dec:	12h 36.3m 25° 59'
Redshift	0.004103 ± 0.000017
Radial Velocity	1230 ± 5 km/s

NGC 5907

Other names	NGC 5906 MCG +9-25-040
Position RA: Dec:	15h 15.9m 56° 19'
Redshift	0.002225 ± 0.000010
Radial Velocity	667 ± 3 km/s