Finder Chart for Jim's Pick of the Month August 2020
Messier 31: Andromeda Galaxy

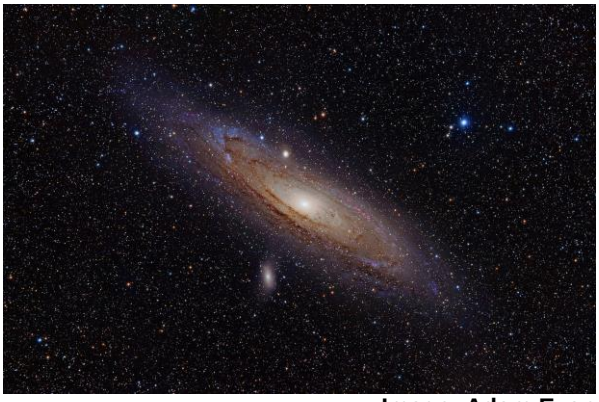

Image: Adam Evans

FACTS
Object: Galaxy
Type: Spiral
Class: SA(s)b
Designations: Messier 31, M31, Andromeda Galaxy, NGC 224,
Constellation: Andromeda
Right ascension: 00h 42m 44.3s
Declination: +41°16'9"
Distance: 2.54 million light years (778,000 parsecs)
Number of stars: 1 trillion
Apparent magnitude: +3.44
Absolute magnitude: -21.5
Apparent dimensions: 190′ x 60′
Size: 220,000 light years (linear diameter)

Messier 31 (M31), better known as the Andromeda Galaxy, is a large spiral galaxy located in the constellation Andromeda.

At a distance of 2.54 million light years from Earth, the Andromeda Galaxy is the nearest major galaxy to our own and is on a collision course with our home galaxy, the Milky Way. Messier 31 has an apparent magnitude of 3.44. Its designation in the New General Catalogue is NGC 224.

The Andromeda Galaxy is relatively easy to find in the sky as it is one of the brightest Messier objects. It lies in the vicinity of two prominent asterisms in the northern sky: the Great Square of Pegasus (formed by Alpheratz, Algenib, Markab and Scheat) and Cassiopeia's W. The only objects listed in Messier's catalogue that are brighter than M31 are the Pleiades (M45) and the Ptolemy Cluster (M7).

In 10×50 binoculars, the galaxy appears as an oval shaped cloud with a bright nucleus. Binoculars and small telescopes reveal only the galaxy's bright core, but larger instruments show its full size, which is six times larger than the apparent diameter of the full Moon. The Andromeda Galaxy's brightest companions, the dwarf galaxies Messier 32 and Messier 110, can also be seen in binoculars.