

The Sun is continuing to climb north this month. It crossed the celestial equator at last month's equinox and at the beginning of April will have a declination of $+5^\circ$ but by the end of the month will have climbed to $+14^\circ$.

At the end of March we put our clocks forward an hour, entering British Summer Time. At the beginning of the month the Sun will rise around 6.40 am British Summer Time and will set around 19.40 pm British Summer Time giving a day length of about 13 hours. By the end of the month the Sun will rise around 5.30 am British Summer Time and will set around 20.30 pm giving a day length of around 15 hours.

The Moon will be new on the 5th April and be at first quarter on the 12th. It will be full on the 19th and will have reached last quarter on the 26th. During the evening of April 13/14th the Moon will pass close to M44, the Beehive Cluster. This promises to be a splendid sight in a pair of binoculars.

The Moon, just past first quarter, will approach the cluster around 9 pm British Summer Time. Between then and midnight it will slowly drift past the cluster, passing in front of some of its more southerly stars. The leading edge of the Moon will be in darkness so the stars will suddenly disappear, reappearing later from the bright trailing edge.

The Planets

Both Mercury and Venus are poorly placed for observation this month as are the ice giants Uranus and Neptune.

Mars continues to be visible in the early evening sky, although it is now too far away to discern surface features through amateur telescopes. It will shine at magnitude +1.5 among the stars of Taurus. By the end of the month it will be setting around midnight British Summer Time.

Jupiter is pulling further and further from the Sun. By mid-month it will rise around 1.00 am British Summer Time shining at magnitude - 2.3 and will be in the south about an hour before sunrise. It will reach opposition (being on the opposite side of the sky to the Sun) in June.

Saturn is visible low in the predawn sky. Like Jupiter it is pulling further and further away from the Sun and is shining at magnitude +0.6. It will reach opposition in July.

The Lyrid meteor shower is active around mid-month. It is expected to produce about 10 meteors per hour and the peak is predicted to occur around 1am British Summer Time. The radiant is to the right of the bright star Vega in the constellation of Lyra from which the shower takes its name. Unfortunately, a waning gibbous moon rises a little before midnight but should not cause too much of a problem.

This month the Virgo cluster of galaxies are well placed for observation. The cluster can be found to the left of the tail of Leo the Lion, marked by the bright star Denebola.

For those of you collecting Messier objects there are six galaxies to be found between the Lion and Coma Berenices. The Messier numbers, in order, are as follows:

M61 RA 12 hours 21 mins, Declination +04° 28mins 20secs

This is a magnitude +9.7 face-on spiral galaxy which is bright enough to be detectable in telescopes as small as 80 millimeters.

M87 RA 12 hours 30 mins 48 secs, Declination +12° 23mins 28 secs

This is a super-giant elliptical galaxy lying in the center of the cluster. It shines at +8.6 and is around 53 to 55 million light years away. Its luminosity is 50 billion times as bright as our Sun and has a central jet driven by a black hole which could have a mass as much as 7 billion Suns.

M88 RA 12 hours 31 mins 59 secs, Declination +14° 25 mins 12 secs.

This is a spiral galaxy seen at an angle to our line of sight. It has a magnitude of +9.5. It is 57 million light years from us and is part of a chain of galaxies.

M90 RA 12 hours 36 mins 50 secs, Declination +13° 09 mins 48secs.

This is a spiral galaxy inclined at an angle to us. It has a magnitude of + 9.5. It is thought to be 58 million light years from us and, despite having a low surface brightness, is detectable in an 80 millimeter telescope.

M99 RA 12 hours 18 mins 49 secs, Declination +14° 25 mins 49 secs

This is another face-on spiral galaxy and has a magnitude of +9.8. One of its viral arms is large and seems pulled away from the main set of arms.

M100 RA 12 hours 22 mins 55secs, Declination +15° 49 mins 25 secs

A near symmetrical face-on galaxy of magnitude +9.4. It is one of the largest and brightest of the Virgo cluster. It is estimated to be 107,000 light years across.

That is all for this month. Wishing you clear skies until we meet again in May.