The Pocket Planetarium ★

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Astronomical Information Newsletter of the Planétarium de Montréal

The Starry Sky — Spring 2008

How to Use this Map

The above map represents the night sky as it appears at the indicated times, and remains usable several hours before and after.

Hold the map up to the sky in front of you and turn it so the direction you are facing appears at the bottom. Lines identify the constellations. The light-coloured area outlines the Milky Way.

Visit our Website: www.planetarium.montreal.qc.ca

This Star Map is Accurate on...

(Eastern Daylight Time)

March 21 at 1 a.m.
April 6 at midnight
April 21 at 11 p.m.
May 6 at 10 p.m.
May 21 at 9 p.m.

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The Sky This Spring

Saturn, Mars and Mercury dominate the evening sky, while Jupiter, visible late at night, gets ready for its summer show.

Saturn and Regulus

As spring begins, **Saturn** shines in Leo well above the southeast horizon at dusk: the ringed planet remains visible all night and sets at dawn. However, by season's end, Saturn appears at twilight above the western horizon, and sets just before midnight. The ringed planet has been in retrograde motion, moving westward against the starry background since December 21. However, on May 3, it becomes stationary within 2 degrees of the star **Regulus** before resuming its direct eastward motion.

If you have the opportunity to observe Saturn's rings in a telescope, you will notice they are barely inclined, a mere 9 degrees. This is a taste of what we can expect in 2009 when the rings will appear edge-on and will be invisible.

Saturn and Regulus get monthly visits from the Moon. On the evening of March 18, the Moon, Regulus and Saturn will form a straight line spanning 7 degrees. The Moon then closes in on Regulus during the night and, by sunrise on the 19, the celestial trio forms a right-angled triangle.

The Moon re-visits Saturn and Regulus during the night of April 14 to 15 and April 15 to 16. Our trio is reunited once again on the evening of May 12 to form another triangle; the Moon is merely 4 degrees from the other two objects. Finally, a crescent Moon forms another tight little triangle with Saturn and Regulus on the evening of June 8.

Mercury in the night sky

Spring begins with a bang: the spectacular conjunction of **Mercury** with Venus on the morning of March 23. The two planets will be a mere degree apart from one another and will rise at around 6:30 a.m. EDT, about 30 minutes before the Sun. You'll have to be quick; find an area with a clear eastern horizon and watch carefully. Use binoculars to locate the planets in the dawn's glare.

Mercury disappears behind the Sun in mid-April and remains lost in the Sun's glare until the end of the month. In late April, the tiny planet moves above the west-northwest horizon at twilight. As it moves away from the Sun, it also gets closer to M45, the Pleiades star cluster in Taurus. On May 2, Mercury will be 2 degrees from the Pleiades, 45 minutes before it sets. A thin crescent Moon moves to within 3 degrees of Mercury on the night of May 6.

During mid-May, Mercury will set in the northwest two hours after the Sun. However, this window of opportunity will be short-lived. After mid-May, Mercury's glow will fade away quickly and the little planet will get closer and closer to the horizon. It will disappear rapidly in the glow of twilight.

On the evening of May 8, Mercury will be 8 degrees from Aldebaran, the brightest star in Taurus the Bull.

Mars in the evening sky

Mars is already high in the south early in the evening in the constellation Gemini. As spring marches on, it will set earlier and earlier. In fact, by the beginning of summer, Mars will be visible for little more than 2 hours. The red planet will nonetheless be a worthwhile object to watch.

On April 28, Mars will be less than 5 degrees from the star Pollux in Gemini, and will enter the constellation of Cancer on May 5. **It will then move through M44, the Beehive Cluster, from May 21 to May 23.** A must-see with binoculars or, even better, with a small telescope. The red planet leaves Cancer and enters Leo the Lion on June 10. Everything is set for two superb conjunctions with Regulus and Saturn in early summer.

A crescent Moon appears within half a degree of Mars during the night of April 11 to 12; within 6 degrees on the evening of May 9, and again within 2 degrees of the red planet on the evening of June 7.

Jupiter prepares for summer

Jupiter rises at around 4:00 a.m. EDT in Sagittarius at the beginning of spring, and earlier and earlier as the season progresses. As summer begins, the giant planet will rise at around 22:00 and be visible all night. Jupiter begins its retrograde motion in Sagittarius on May 9 and will move westward against the starry background for the next 4 months.

The last quarter Moon is less than 6 degrees from Jupiter during the wee hours of March 30. The Moon appears 3 and a half degrees below Jupiter on the morning of April 27: It gets to within 4½ degrees of the giant planet during the night of May 23 to 24, and again to within 5 degrees during the night of June 19 to 20.

Venus: hidden behind the Sun

Venus begins spring just one degree from Mercury on Easter morning, March 23. It then gradually disappears in the glare of the Sun in April. On June 9, Venus passes behind the Sun and returns to the evening sky in July.

Happy observing!

Research and text: **André Bordeleau**

Seasonal Milestones

The **spring equinox** takes place on March 20, at 01:49 Eastern Daylight Time, and the **summer solstice** will occur on June 20 at 20:00. Spring 2008 will last exactly 92d 18h 11m.

The best meteor shower of 2008 will be the **Eta Aquarids** since it will take place during a New Moon. The maximum of the shower is expected on May 5 at 14:00 EDT. The prime viewing period will occur on the mornings of May 5 and 6, between 03:00 and dawn.

Phases of the Moon

(Eastern Daylight Time)

First quarter	Full moon
March 14 at 6:46	March 21 at 14:40
April 12 at 14:32	April 20 at 6:25
May 11 at 23:47	May 19 at 22:11
June 10 at 11:04	June 18 at 13:30
Last quarter	**New moon**
March 29 at 17:47	April 5 at 23:55
April 28 at 10:12	May 5 at 8:18
May 27 at 22:57	June 3 at 15:23
June 26 at 8:10	July 2 at 22:19

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