## **€**Pocket Planetarium ★ Volume 9 Number 2 Spring 2005

Astronomical Information Newsletter of the Planétarium de Montréal

The Starry Sky — Spring 2005



**Montréal** 徐웅

#### 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 contellations. The light band outlines the Milky way.



This Star Map is Accurate on...

(Eastern Daylight Time, except where indicated) March 21 at midnight EST 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

The giant planets, Jupiter and Saturn, share the spotlight in the evening sky, while Mars quietly prepares itself for next autumn's show. And Venus, conspicuously absent from the spring sky, will gradually reappear in May.

#### Jupiter in the spotlight

Conditions for observing Jupiter will be ideal when the planet is in opposition on April 3rd. On that date, the gas giant rises at sunset and remains visible all night, though it is best observed as the sky darkens. Yet from mid-May onward, Jupiter is already past culmination at twilight, and since the Sun sets later and later each evening, the observing window narrows rapidly. However, the observer's efforts are well rewarded: Through a small telescope, Jupiter's four largest moons and its atmospheric cloud bands can be easily seen.

Jupiter is currently in the constellation Virgo, a region of sky with few bright stars, which makes the giant planet easy to find. However, to help confirm one's observation, the Moon is near Jupiter on the night of March 25 to 26; on the nights April 21 to 23; on the night of May 19 to 20; and again on the evening of June 15 (when the gap between the two is just 2 degrees).

#### **Magnificent Saturn**

April and May offer one last chance to admire the ringed planet before it disappears until next winter. Saturn is best viewed when it is as high as possible in the sky. Since Saturn sets earlier and earlier, telescopic observations should begin right after dark. He who hesitates is lost: Starting in mid-May, Saturn approaches the horizon and the view deteriorates rapidly.

This spring, Saturn remains in the vicinity of Pollux and Castor, the "twin" stars in Gemini. The scalene triangle formed by this trio gets progressively flatter as Saturn moves to the east: In June, when Saturn disappears in the twilight, the three objects form a nearly straight line. The crescent Moon is next

to the trio on the evening of April 15; on May 12 & 13; and again on June 9.

#### Mars prepares its return

Mars currently rises just a few hours before the Sun: At night's end the red planet can be found close to the eastsoutheastern horizon. During early spring Mars is in the constellation Capricornus: It moves into Aquarius at the end of April, and then into Pisces in June. Though far from its maximum brightness, Mars' orange colour makes it easy to find in this sparsely populated region of sky. All the same, a thin crescent Moon appears near Mars on the mornings of April 3 & 4; May 2 & 3; and again on May 31.

This spring, the distance between Earth and Mars is still great: The planet's disk is too small to show any details in an amateur telescope. However, as autumn approaches Mars will provide a more interesting target.

**Venus reappears in the evening** Venus has not been visible since the end of January when it moved behind the Sun. However, during the month of May, the dazzling planet will gradually reappear near the west-northwestern horizon at twilight. At the beginning of June, it sets an hour-and-a-half after the Sun: Half an hour after sunset Venus is 8 degrees above the horizon.

**On June 8**, the crescent Moon is suspended 6 degrees above the brilliant planet. And as June progresses, Venus and Saturn approach each other, en route to a grand celestial rendezvous on the evening of June 25.

### Mercury's grand rendezvous

Mercury, the closest planet to the Sun, is not easy to spot this spring.

However, as of mid-June, it can be found to the right of Venus: Scan the west-northwestern horizon 30 minutes after sunset. Over the following days, Mercury rapidly approaches Venus. **After sunset on June 27**, the two planets will be right next to each other – barely 7 arc-minutes apart! Saturn will be nearby, completing this grand celestial rendezvous.

Happy observing!

Research, text and illustrations: Marc Jobin Translation: Louie Bernstein

#### **Seasonal Milestones**

The **spring equinox** will take place on March 20, 2005 at 07:33 EST. The **summer solstice** occurs on June 21, at 02:46 EDT. Spring 2005 will last 92d 18h 13m.

Early on the morning of April 3, we switch to **Eastern Daylight Time:** Clocks move ahead one hour.

(Eastern Daylight Time, except * = Eastern Standard Time) New moon First quarter
New moon First quarter
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March 10 at 4:10* March 17 at 14:19*
April 8 at 16:32 April 16 at 10:37
May 8 at 4:45 May 16 at 4:57
June 6 at 17:55 June 14 at 21:22
Full moon Last quarter
March 25 at 15:58* April 1 at 19:50*
April 24 at 6:06 May 1 at 2:24
May 23 at 16:18 May 30 at 7:47
June 22 at 0:14 June 28 at 14:23

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