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THE PRAIRIE ASTRONOMER

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FEBRUARY MEETING CONCLUDES SPEED OF LIGHT, HAS ASTROPHOTO EFFORTS

The February meeting will be held at the usual place, Olin Hall, Nebraska Wesleyan University, at 7:30 p.m., Tuesday, February 22.

Curt Roelle will continue the talk he began in the January meeting on his determination of the speed of light. Walt Baumann has been experimenting with his Celestron 8 in astrophotography, and has promised to bring some samples of his work.

The Observers Handbooks have arrived from the Royal Astronomical Society of Canada. They will be on sale at \$3.00 each, and there is only a limited number. So if you want one, be sure to attend the meeting.

As you probably know by now, the Lincoln City Council approved the Hyde Memorial Observatory, clearing the way for its construction in Holmes Park. Carroll Moore should have a report on the plans at our meeting.

QUICKIE NEWS NOTES...

The Soviet astronomer I. Shklovsky, who wrote the classic Intelligent Life in the Universe with Carl Sagan has modified his view of the existence of extra-terrestrial life. He has recently presented arguments that earth and sun are probably a unique situation in the Milky Way, so that our type of life is a "miracle." He does not believe we are alone, but that there are no other similar civilizations, in any stage of development. Since the probably negative result of the Viking biology experiments on Mars, we may wonder if we are the only life form in the solar system as well. "The realization that humanity is at the vanguard of matter implies that humankind has deep responsibilities," Shkovsky said.

There are 1,092 first-magnitude stars in the sky, yet the combined brightness of all naked-eye stars would result in an object that would have a magnitude of only -6.6! Surprised? Then

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MEMBERS VOTE DUES CHANGE

At the January meeting, the club membership approved an increase in dues that became effective January 26. The new dues schedule is as follows:

Regular member (1 vote)	\$10
Family member (2 votes)	\$12
Newsletter only	\$4

If you do not attend meetings for some reason, please send your renewal directly to the club treasurer, Lee Thomas, rather than to other club officers or ex-officers. Some renewal orders have been delayed as much as six weeks because of the difficulty of communicating between meetings.

Information for helping to

SUNDAY	MONDAY	TUESDAY		
<p>Planets: Watch the fast departure of <i>Venus</i>, the brilliant evening "star". It sets in WNW more than 3 hrs after sunset in early March. By Mar 22 it sets 2 hrs after sun; by Mar 30, only 1 hr. Track 'til Apr 6. See boxes after Mar 31.</p>	<p>Observers with binoculars or telescopes should watch <i>Venus</i>' thinning crescent. To avoid contrast of <i>Venus</i> against dark sky, look at sunset or in early twilight. Bright <i>Jupiter</i> is 32°-41° upper left of <i>Venus</i>. See map for position of <i>Saturn</i>.</p>	<p>One hour after sunset: Pollux Moon Procyon Saturn</p>	1	One sun
<p>Tonight, moon rises about as evening twilight ends. For observers at lat 40°N, moonrise occurs 1hr 10m later each night for next few nights. Thus starting tomorrow, sky will get very dark for a while before moonrise.</p>	<p>Currently, <i>Spica</i> rises about 3 hrs after sunset. Tonight 4 hrs after sunset:</p> <p>Moon Spica</p>	<p>One hour before sunrise: Moon Spica</p>	8	One sun
<p>This week, to an observer who looks at sunset each evening (or a fixed interval afterward), <i>Venus</i> gets 1° lower each night. On March 31st <i>Venus</i> will be only 10° above horizon at sunset and dropping 1.5° lower each night.</p>	<p>Tonight at sunset, <i>Venus</i> is 30° above the horizon. Watch <i>Venus</i> rapidly get lower next 3 weeks. Altitude of <i>Venus</i> at sunset each Monday: March 21: 23° March 28: 14° April 4: 3° Crescent in binoculars.</p>	<p>Locations of planets, 1 hr after sunset: <i>Venus</i>: West, 18° up <i>Jupiter</i>: WSW, 45° up <i>Saturn</i>: ESE 54° up <i>Sirius</i>, the brightest star, is 33° up in S. as seen from lat 40°N.</p>	15	40 sun Hay Her
<p>45 min after sunset: Venus Moon</p>	<p>45 min after sunset: Moon Venus</p>	<p>45 min after sunset: Moon Venus</p>	20	21 One sun Aid
<p>First Quarter (evening half moon). In next 10 days, as <i>Venus</i> departs from evening sky, it begins to be seen in morning. Try to see it on last possible evening and first possible morn. See after 31.</p>	<p>One hour after sunset: Saturn Moon tomorrow Moon tonight Procyon</p>	<p>A few evenings around this date, four planets can be viewed simultaneously in evening sky. 40 min after sunset tonight, two are 5° up between W & WNW: (7.5° apart) <i>Mercury</i> & <i>Venus</i>.</p>	27	28 One sun Reg

Magnitudes of the Planets: *Venus* -4.3 to -3.4; *Jupiter* -1.8 to -1.6; *Saturn* +0.2 to +0.3; *Mars* +1.4
Mercury: Mar 27 -1.2; Apr 1 -0.8; Planets against star background: *Venus* moves eastward 0.5° per day as March opens, but slows, becomes stationary Mar 16, then begins retrograde. *Jupiter* moves 5° eastward in February this month; on Mar 1 it is 7° SW of the Pleiades. Watch it pass 4.7° south of that cluster Apr 1; *Saturn* retrogrades (moves west) 1.3° in Cancer. On Mar 1, it is 4.5° east of *Betelgeuse*; by Mar 31, 3.2° east. Use binoculars to view the individual stars of the *Betelgeuse* cluster.

Teachers and students observe the sky

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p>One hour after sunset: 2</p> <p>Procyon ●</p> <p>Moon ○</p>	<p>One hour after sunset: 3</p> <p>Saturn ●</p> <p>Moon ○</p> <p>Regulus ●</p>	<p>One hour after sunset: 4</p> <p>Regulus ●</p> <p>Moon ○</p>	<p>5</p> <p>Moon, just past exact full phase, rises about 20 min after sunset tonight. It remains above horizon for rest of night, and sets very shortly after sunrise tomorrow.</p>
<p>One hour before sunrise: 9</p> <p>Spica ●</p>	<p>At sunset tonight, look for Venus 33° nearly directly above sun. Steadily held 7X binoculars show it as a thin crescent. Shortly after sunset Jupiter is also visible, 32° upper left of Venus. Binoculars show Jupiter as a full disk. 10</p>	<p>One hour before sunrise: 11</p> <p>Moon ○ tomorrow</p> <p>Antares ●</p> <p>Moon ○ today</p>	<p>12</p> <p>Last Quarter (morning half moon). Happy Birthday Pisces! According to astrologers, sun entered your sign Feb 18. But sun crossed into your constellation yesterday & leaves it Apr 18.</p>
<p>40 min before sunrise: 16</p> <p>Have you seen Mars yet? It's your chance!</p> <p>Moon ☾</p> <p>Mars ●</p>	<p>40 min before sunrise: 17</p> <p>Moon ☾</p> <p>Mars ●</p>	<p>To locate Venus at sunset within a few days, find it as early as you can one evening. Stand to mark its place with top of landmark. Return to site and look in same spot in sky 5 min earlier each day Mar 19-24, 6 min/day 3/25-4/6.</p>	<p>19</p> <p>New Moon, not visible. Equinox tomorrow; sun will pass directly over equator. From your location, sun's midday altitude will equal 90 degrees minus your latitude.</p>
<p>One hour after sunset: 23</p> <p>Aldebaran ●</p> <p>Pleiades ○</p> <p>Jupiter ●</p> <p>Moon ☾</p>	<p>Jupiter within 5° of Pleiades now thru Apr 9. Watch Jupiter pass this cluster next week and approach Aldebaran in April. Tonight 1 hr past sunset: 24</p> <p>Pleiades ○</p> <p>Moon ☾</p> <p>Jupiter ●</p>	<p>One hour after sunset: 25</p> <p>Moon ☾</p> <p>Aldebaran ●</p> <p>Pleiades ○</p> <p>Jupiter ●</p>	<p>40 min after sunset: 26</p> <p>Use departing Venus to introduce yourself to Mercury. See also Mar 29, 31, and Apr 1.</p> <p>Venus ●</p> <p>(9° apart)</p> <p>Mercury ●</p>
<p>One hour after sunset: 30</p> <p>Saturn ●</p> <p>Moon ○ tonight</p> <p>Moon ○ tomorrow</p>	<p>40 min after sunset: 31</p> <p>(10° apart)</p> <p>Mercury ●</p> <p>Venus ●</p>	<p>Location of Venus relative to setting sun, Mar 25-Apr 6. 26°</p> <p>March 26°</p> <p>28° Venus in Evening Sky</p> <p>30°</p> <p>April 1°</p> <p>3°</p> <p>5°</p> <p>Sun ☀</p>	<p>Location of Venus relative to rising sun, Mar 28-Apr 14.</p> <p>Venus in Morning Sky</p> <p>March 29° 31°</p> <p>April 1° 2° 4° 6° 8° 10° 12° 14°</p> <p>Sun ☀</p>

East Lansing Sunrise: March 1 7:14 a.m.; March 16 6:49 a.m.; March 31 6:23 a.m. EST
 Sunset: March 1 6:27 p.m.; March 16 6:45 p.m.; March 31 7:03 p.m. EST

PLAN A COLORADO VACATION--AND ATTEND A MAJOR ASTRONOMY CONVENTION!

They didn't have any snow, so you probably couldn't find an excuse to go skiing in Colorado this winter. But in August, you'll have an excellent excuse to spend some time in Boulder. The Astronomical League, Association of Lunar and Planetary Observers, International Occultation Timing Association, Western Amateur Astronomers, and the host National Amateur Astronomers will hold a truly national convention at the University of Colorado August 10-13. This is the first time in recent memory that the Western Amateur Astronomers and Astronomical League, separated by the Rocky Mountains and some occasionally rockier differences of opinion, have met for a joint convention, and it is so close to home that to miss this

one would be a cosmic oversight.

We're talking about it early so you won't be able to forget when you formulate your vacation plans.

A tentative agenda from the Denver Astronomical Society indicates that, besides extensive paper sessions, there will be a show at the Fiske Planetarium, star parties at Huzanga Meadows and Flagstaff Mountain, and visits to Sommers-Bausch Observatory, NCAR and NBS.

QUICK NEWS NOTES (from page 1)

consider this: stars have such tiny angular diameters that if all the discs of naked-eye stars were combined, the single resulting disc would have a diameter of less than one second of arc!

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