

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 40, No. 3

March 2009

Comet Lulin Meets Regulus



Comet C/2007 N3 (Lulin) reached perihelion on January 10 and soon became visible in telescopes. Its retrograde motion took it closest to earth on February 24 at magnitude 5, visible naked eye from dark sites. Four days later it passed the star Regulus in Leo for a beautiful telescopic pair.

Photo by Tenho Tuomi



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To view *Saskatoon Skies* in colour, see our Website:
<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$77.00 /year

Youth: \$41.00 /year

Associate: \$33 /year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mark de Jong, or renew through the National Office and let Mark know that you did!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- The Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Telescopes
<http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at norj@sasktel.net .

U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

SASKATOON CENTRE'S MAIN OFFICERS:

President – Barb Wright, 249-1990
Secretary – Al Hartridge, 373-0034
Vice-President – Jeff Swick, 373-3902
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Darrell Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 374-9278.

Newsletter Editors – Christine Kulyk & Tenho Tuomi

Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at clkulyk@sasktel.net – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise indicated), provided that proper source credit is given. DEADLINE for submissions for each month's issue is the 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

LIGHT POLLUTION ABATEMENT
WEBSITE AT:
www.rass.sk.ca/lpc/lpc.htm

RASC CALENDAR OF EVENTS

Mar 14	Observers Group – 7:00 pm, Sleaford Observatory	Larry Scott	934-5801
Mar 16	RASC Executive Meeting – 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Mar 16	RASC General Meeting – 7:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Mar 21	Messier Marathon – 7:00 pm, Sleaford Observatory	Larry Scott	934-5801
Apr 2-4	100 Hours of Astronomy – Fairhaven, Lakewood, Beaver Creek	Jeff Swick	373-3902
Apr 17	Observers Group – 8:00 pm, Sleaford Observatory	Larry Scott	934-5801
Apr 17-18	Astronomy at Anglin Lake	Barb Wright	249-1990
Apr 20	Potluck Supper & Astronomy Art Workshop – 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
May 15	Observer's Group – 9:00 pm, Sleaford Observatory	Larry Scott	934-5801
Aug 13-16	RASC General assembly & SSSP – Cypress Hills	Barb Wright	249-1990

Minutes of the Executive Meeting February 9, 2009 by Al Hartridge

1. Meeting called to order at 6:30 pm.
2. Approval of the minutes of the previous meeting: Moved by Tenho Tuomi, seconded by Norma Jensen, and carried.
3. Financial Report: Norma Jensen reported no increase in donations to Hydomako Memorial Fund since last meeting.
4. National Rep: A report should be sent to National Office by March indicating the progress with arrangements for the upcoming GA. Our updated by-laws should also be sent to National for approval. The Centre's portion of our Life Memberships can no longer be transferred by National. With our three Life Members, we will lose \$100 per year in revenue. It was determined that Associate Members should pay \$33 per year.
5. IYA Activities: Handout materials are available from National to distribute at IYA events. Events and number of people attending need to be recorded and sent to National. Ellen Dickson has volunteered to do the registering of events and numbers and reporting to National. Other materials, i.e. SSSP info, light abatement info, could also be distributed at these events.
6. Meeting adjourned at 7:15 pm.

Minutes of the General Meeting February 9, 2009 by Al Hartridge

1. Meeting called to order at 7:30 pm.
2. Approval of the minutes of the previous meeting: Moved by Mike Clancy, seconded by Ellen Dickson, and carried.
3. Events (Jeff Swick): A Messier Marathon will be held March 21. An astronomy presentation will take place at Fairhaven School in early April as part of 100 Hours of Astronomy. The Lakewood Civic Centre, Farmer's Market, and Beaver Creek have also been booked for 100 Hours of Astronomy.
4. Observers Group: Next two events will be held on Feb. 20 and Mar. 14.
5. National Rep: Please see Executive Minutes.
6. Membership (Mark de Jong): At present, there are 72 regular, 2 associate, and 1 temporary members.
7. Light Abatement: Rick Huziak stated that Grasslands Provincial Park requests to be made a dark sky preserve, and also Fort Walsh is requesting a dark sky outreach program.
8. IYA Activities: Please see Executive Minutes.
9. Newsletter: Deadline for March issue is Feb. 23.
10. Sleaford Site Coordinator: Darrell is waiting for a list of things to be fixed.
11. April Meeting: Will be a potluck supper at 6:30pm, followed by an Astronomy Art Workshop.
12. Presentation: "The Buzzard Coulee Meteorite Fall," by Alan Hildebrand
13. Meeting adjourned at 9:25 pm.

MONDAY, March 16, 7:30 PM
Room 175, Physics Bldg., U of S



There will be an Executive Meeting at 6:30 pm.

“Meteorite Hunting at Buzzard Coulee”
by Gordon Sarty, Garry Stone, and Tenho Tuomi
&
International Year of Astronomy 2009

BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

The following featured books will be available for purchase at the March 16 meeting:

SEEING IN THE DARK by Timothy Ferris
2003 ----- \$18.00

An in-depth exploration of many of the major areas of observation in astronomy, with descriptions of large telescopes and observatories around the world. Leads amateur astronomers into the irresistible challenges of personal observations of the Moon, planets, asteroids, our Milky Way, and other galaxies.

PATRICK MOORE ON THE MOON 2006
----- \$27.00

PATRICK MOORE ON MARS ----- \$23.00

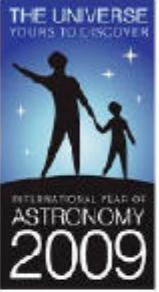
Packed with good illustrations and detailed descriptions of surface features by one of the world's acclaimed experts, these are excellent guides to studies of the Moon and Mars.

All-Star Telescope
www.All-StarTelescope.com

Our Mission: Helping People Discover the Wonders of the Night Sky



A photograph of a man wearing a white shirt and a dark cap, standing next to a large telescope mounted on a tripod. He is looking towards the camera. In the background, there are trees and a white van.



A poster for the International Year of Astronomy 2009. It features a silhouette of a man and a child holding hands, standing in front of a starry sky. The text on the poster reads: "THE UNIVERSE YOURS TO DISCOVER", "INTERNATIONAL YEAR OF ASTRONOMY", and "2009".

Binocular Star Walk
with Murray Paulson
Saturday, March 21 - 9:00 PM

See website for details
on our Observer Nights
& driving directions

TeleVue
PRIMED PLUS CELESTION DENVER



Three telescope models are shown: an Orion StarBlast 6" telescope, an Orion SkyQuest 8" telescope, and a Sky-Watcher Collapsible 10&12" telescope.

LOSMANDY

1-866-310-8844 - Didsbury, Alberta
Test drive equipment under dark skies



Venus-Moon Conjunction, February 27.

Photo by Garry Stone

No matter where you live or what your background in astronomy is, the 2009 International Year of Astronomy promises plenty of opportunities for people of all ages to participate. The Saskatoon Centre will be hosting numerous events in venues located in several different Saskatchewan locales.

A premier event will be 100 Hours of Astronomy, to be held April 2 to 4 at venues including the Fairhaven School and Lakewood Civic Centre in Saskatoon, as well as at Beaver Creek Conservation Area. Our Centre President, Barb Wright, has asked the City to declare the first week in April as 'Saskatoon Astronomy Week.'

Barb notes: "What you can do is call your neighbourhood school or local Brownies or Scouts group and let them know you will set up your telescope for them to have a look one evening that week. It doesn't have to be a big organized event, just an hour or so close to home. Pick up some free, colourful IYA handout materials at our next meeting, and have fun."

You'll find information about other upcoming events elsewhere in this issue. We encourage everyone to get in on the action and share your own "Galileo Moments" with as many others as possible this year. Be sure to contact Ellen Dickson to register your event (see below).

Register Your IYA Activities & Events!

by Ellen Dickson

While we got off to a slow start in our International Year of Astronomy event schedule, I would like to take this opportunity to **thank** everyone that has planned, organized, and participated in these events.

These are the events that have taken place so far: Brightwater Star Talks, Wintershines, Space Club, Fireball & Astronomy Talk, Campus Observatory Public Viewing. Total of people participating in these events: 646.

Upcoming events planned are the following:
Anglin Lake; 100 Hours of Astronomy

CONTACT Ellen Dickson to register your event or report on its attendance.

1. Please inform me by e-mail (dicksonl@sasktel.net) or by phone (306- 249-1091) ASAP.
2. Information needed is as follows:



A) What?

Name or title of the event (French optional); event description (French description optional). Language (lectures, plays, etc). Free event? Kid-friendly? Open to Public, or Private event? URL is not required but is strongly recommended!

B) Where?

City, province, region (please provide URL). (specific site address not needed)

C) When?

Date & Time: Start date & time, End date & time (optional). Continuous? Times vary?

Again, my thanks to all those who have submitted events thus far: Ron, Gord, Barb, Jeff, Kathleen; and to all those who participated in these events. It is my hope that many more will continue to add to our numbers and to the love of all things astronomic.

Astronomy at Anglin Lake: April 17 to 18

This International Year of Astronomy program will be open to guests of Land of the Loon Resort and to community members. The Saskatoon Centre is organizing activities for this program (as outlined in the tentative schedule below).

Friday, April 17

20:30: Meet and greet at Conference Centre; brief introduction to viewing; constellation maps and other handouts available to public (will be on display for the weekend)

21:00: Viewing at the boat launch

Cloudy Skies alternative program (both evenings): Various DVDs with/without commentary

Saturday, April 18

15:00: 1-hour presentation on Light Pollution and on better home outdoor lighting (with handouts available)

21:00: Viewing at boat launch

Please contact Barb Wright (wrightb@sasktel.net; 306-249-1990) before March 31 if you can help with any of the above.

GENERAL INFORMATION: A complimentary supper Saturday night and brunch Sunday morning will be provided for vigorous volunteers. We've booked a cabin that sleeps 10 for a cost of approx. \$40-\$50 for the weekend. Or you may book a private cabin by contacting the Resort directly. Be sure to wear warm clothing and boots. Red lights only in viewing area. Vehicle access to the viewing site will be only for those bringing scopes; all other vehicles must be left in parking area.

Astronomy Art Workshop: Monday, April 20

“Holes in the Sky/*Les Trou du Ciel*”

by Kathleen Houston

We will create artwork for the window-mural project at the IYA exhibition “Celebrating the Night Sky,” to be on display at the Saskatoon downtown Frances Morrison Library Gallery from September 2 to October 1.

The Inuit call the stars “holes in the sky,” as if the velvety celestial vault is but pierced by light.



Kathleen will provide a bank of images and maps to work from, and you will provide the experiences that inspire!

We will create our own holes in the sky with special black paper, nails to pierce our favourite constellations and sky objects — real and imagined — and finish with oil pastel. Materials required: your sense of adventure, your experience and stories!

The creative fire to pierce the sky can take shape at any age

Artwork by Marael Houston, photographed by Kathleen Houston

RASC General Assembly: Call for Artwork

by Kathleen Houston

The Saskatoon Centre is hosting an Art, Quilt, and Poetry Exhibition as part of the RASC National General Assembly, August 13 to 16. This exhibition will be in the Moose Room at the Cypress Hills Resort. The Exhibition theme is: "Starry, starry night. . ."

This astronomy-themed art exhibition is open to kids (4-12 years), youth (13-17), and adults. Art created by you is welcome in the following categories: quilt, cross-stitch, poetry, drawing, painting, collage, and any photograph not in the photography contest.

- **Poetry:** Frame it on black paper, and decorate the paper with drawing and symbols if you

wish.

- **Artworks on paper:** Recommended maximum of 15" x 20", mounted on black construction paper.
- **Canvas, framed works, quilts, and cross-stitch:** Exhibitors for this category must contact Kathleen at sssp.sk@sasktel.net prior to the GA/SSSP to make arrangements for your space.

For all other categories, please drop your work off, ready for exhibiting, at the Moose Room when you arrive at Cypress Hills Resort.

If you have any questions, please contact Kathleen Houston at: sssp.sk@sasktel.net

RASC General Assembly: Call for Papers

by Gordon Sarty & Les Dickson

The Saskatoon Centre is hosting the 2009 National General Assembly of the RASC, to be held August 13 to 16 at the Cypress Hills park. We will have two sessions of scientific talks and a poster session where delegates can share their astronomical experiences, data, and insights. To participate, please submit a proposal by e-mail to Gordon Sarty (gordon.sarty@usask.ca).

In your proposal, please include:

- Author list - with the speaker as first author

- Title
- Preference for a talk or poster
- One-paragraph abstract (limit 150 words)
- One image, jpeg format (optional - large images will be reduced in size)

Except for the image, please submit all material in the body of the e-mail, no other attachments please. DEADLINE for the submission of proposals is June 1, 2009. Late proposals can only be considered for posters and only if there is room. Detailed instructions will be e-mailed to the submitters of accepted proposals.



The last aurora of 2008, photographed on December 31 at 12:45 am

Photo by Bob Johnson

Observer's Group Notes

By Larry Scott

The February 20 Observers Group was cancelled due to weather conditions. Prior to that, I was forced by circumstance to miss the meeting on January 19 and go to Sleaford. (Sorry, but it was clear and I had the next day off). The highlight of the night was seeing the Orion Nebula with an OIII filter, which I had not tried before. Highly recommended!

It's been another run of lousy winter skies for me. Either too cloudy or too cold for my tastes. As of this writing (February 24), I'm still waiting for my first look at comet Lulin. That should all come to an end in March, I am sure. Observers Group for March is scheduled for the 14th (moonrise is 00:22 on the 15th, so don't come late). Moonless evening skies are available from the 13th to the 28th.

The Messier Marathon has been scheduled for March 21. Sunset is 19:19, and moonrise is 05:34 on the 22nd, which means if you really want to try the full Marathon, the last 20 or so objects will be washed out by the Moon. I picked this day anyway because I haven't seen too many observers out at 05:30 on any night. If the 21st is clouded out, we will have an opportunity to try again the next weekend, which will have moonless skies all night. If you are serious about the Marathon, make sure you are out and set up early to catch those first few objects after sunset. You should be out and set up by 19:30, not arriving at 19:30. On the other hand, show up whenever you can if you're not tied to finding them all. Messier lists will be available and assistance cheerfully rendered. See you at Sleaford.



Solar Eclipse Tour in China

July 15 – 25, 2009



Don't miss the longest total solar eclipse of the 21st Century on July 22, 2009. This will be a total eclipse of the Sun with a magnitude of 1.080 that will be visible from a narrow corridor through central China and the Pacific Ocean. Totality will last for up to 6 minutes and 39 seconds, and will be visible in many cities including Shanghai.

Tour includes:

- International airfare from Saskatoon
- Domestic flights within China
- Eclipse Event from Shanghai
- Visit to the Shanghai Astronomical Observatory (SHAO) - Sheshan Station
- Great Wall of China
- Terra Cotta Warriors (in Xian)
- Tiananmen Square

\$ 2699 plus tax (based on double occupancy)
• **early booking bonus ends March 15**
• \$2749 when booked before April 15

www.FlyForLess.ca/SolarEclipse
for more details.



1-866-656-3761

If your travels don't take you to China this summer, we also offer [cheap flights](#) across Canada, to the USA, and around the world.



The Planets This Month, March 2009

by Murray D. Paulson, RASC Edmonton Centre

March is the month for inner planet conjunctions.

Mercury will come to superior conjunction on March 30. You will be able to watch Mercury as it closes in on the Sun over the month. It will brighten from magnitude -0.1 at the beginning of the month to magnitude -2.0 by the time of the conjunction. Mercury will pass only 50 arc-minutes below the Sun and will be too close for comfort to apply eye to telescope. You may be able to catch it in the week afterwards as it moves away from the Sun. The week beforehand, it will precede the Sun, and if you are not careful, the Sun will end up shining into an eyepiece. So for safety's sake, pass on the pre-conjunction week. As always, be very cautious when observing near the Sun. You can't afford to make a mistake.

Venus will beat Mercury to the punch with a spectacular inferior conjunction on March 27, giving us one of its better shows as it sails 8.16 degrees above the centre of the Sun. At the beginning of March, Venus sits 34 degrees from the Sun and shines at magnitude -4.5. In the eyepiece, you will see a 46" crescent, signs of things to come. Back to the conjunction: You may be able to catch Venus on the evening before, where it sets 24 minutes after the Sun, 8:31 pm, and again the next morning when it rises 54 minutes before the Sun at 6:16 am (Daylight Saving Time!). It will shine at magnitude -4.0, and the thin crescent subtends 59.3". There is nothing quite like the view of Venus in superior conjunction. The razor-thin crescent is beautiful, and you will actually see more than 180 degrees of it wrapping around the disk because of Venus's thick atmosphere backlit by the Sun. Very cool; but once again, you are using a telescope near the Sun, and it is potentially dangerous if the aperture accidentally catches the Sun.

To find Venus in the daytime, use a scope with GOTO capabilities/setting circles, or use dead reckoning and common sense. My preferred SASKATOON SKIES

instrument is a refractor, but a reflector with an off-axis mask will work quite well. It is nice if you can set up in the shade of a building, but the heat turbulence can be a problem. The most important issue is having a good focus on your scope before you attempt to find Venus. I usually do this by using a solar filter and getting a good focus on the Sun beforehand. If you do this at noon, Venus is directly above the Sun, so raise the telescope the 8.15 degrees to where Venus should be, and then and only then take the solar filter off. Do this with a moderate field of view eyepiece, i.e. 2 degrees or so. Do not try this at high powers, because you will never find Venus. You must make sure that the Sun is not shining into the eyepiece before you look through it. Put a piece of paper (or your hand) up to the eyepiece to make sure there's no brightness; then have a peek. If Venus is not there, pan left or right, but do not move the scope downward towards the Sun. For those of you who like the challenge, stand in the shade behind a building and use binoculars to find Venus, then see if you can spot it naked eye. Good luck!

On March 8, **Saturn** reaches opposition, so the planet will really start to be visible in the evening sky. The month starts out with Saturn shining at magnitude 0.4, and the disk will subtend 19.8". The rings are now tilted up at -2.6 degrees, and they will continue to tilt upward, ending the month at -3.4 degrees. The moons also orbit at this same inclination, so it is interesting to see them lined up much like Jupiter's moons. I have been noting how prominent Saturn's belt systems appear this apparition. It may be a function of less glare from the rings, or that I am hunting for details.

Uranus is in conjunction with the Sun on March 12, so it will be hidden from view.

Neptune is now in the morning sky, but is lost in the twilight glare for the next few months.

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 135 Lunar, or 35 Binocular objects, or Explore the Universe and earn great OBSERVING CERTIFICATES!

MESSIER CLUB	Kathleen Houston	Up!	87
Isabel Williamson Lunar Observing Certificate	Norma Jensen	Up!	50
HERSCHEL 400 CLUB	Tenho Tuomi	Up!	388

Picture Gallery



explained that Galileo was the first to see this 400 years ago. All viewers were treated to cookies and hot chocolate.

Photo by Tenho Tuomi

Jeff Swick managed to capture a decent crescent moon shot on January 31 despite poor seeing, haze, and nearby freeway lights.



Photo by Jeff Swick

SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page

5" Astroscan telescope. Red exterior. Good condition.

8" Celestron Celestar Deluxe S/C telescope. Includes many extras and upgraded items, such as finder, W/O diagonal, Feathertouch focuser, Telrad, Bob's Knobs, Dry Eye dew heater system, padded main scope case, and tripod bag. This scope has great optics, as attested to by a former Celestron employee at a previous SSSP. This scope has seen me through 3 certificates, and will track for hours on end. If you want a great scope, then please consider this one. Over \$3,300 invested. Asking \$1,700. Will consider offers.

Please call Darrell (306-374-9278) about any of the above items.