



# What'sup!

## The Royal Astronomical Society of Canada Belleville Centre Newsletter

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### Extra-Solar Planets and the Search for Habitable Planets

Lecture by Sara Seager on February 1, 2009

On Tuesday, 13 January, 2009, several members of R.A.S.C. - Belleville Centre left Belleville, Ontario, and went to attend a lecture at Currie Hall at the Royal Military College in Kingston, Ontario in honour of International Year of Astronomy - I.Y.A.. Due to a localized power failure within the immediate area and region, the lecture had to be postponed with hopeful expectations of the lecture being rescheduled for the next evening.

### Next Meeting

March 6, 2009  
Loyalist College  
(Pioneer Building P1)

### Observing Nights

March 20, 21  
With a rain-date of  
March 27, 28  
At Pulver Rd.

On Wednesday, 14 January, 2009, Richard B., Joseph S., William B., David P., Antonina V., Donald T., Steven F. and Lionel E., representing R.A.S.C. - Belleville Centre, attended the aforementioned location for a lecture entitled "Extra-Solar Planets and the Search for Habitable Planets". The lecture was presented in a good-sized lecture theatre. The lecture was presented by Professor Sara Seager of MIT. A wonderful slide show impressed the attending audience. One of the facts that was presented involved letting the audience know that there was over three hundred (300) extra-solar planets discovered since serious extra-solar planetary observing started about fifteen (15) years earlier. A brief, short, succinct and concise question-and-answer period came about as a result of the conclusion of the lecture. The lecture lasted from 19:00-20:15 with a social time after the talk. Several brochures were made available on a display table.

### Editor's Pic' Pick



**Mars on my Retina**  
By Dave Pianosi

For the full size colour  
version, and more images,  
check our web gallery on  
the RASC Belleville  
Website  
[www.rascbelleville.ca](http://www.rascbelleville.ca)

Your most humble correspondent determined that the audience could have exceeded two hundred (200) and would/could have included astronomers (amateur and professional), general public and R.M.C. students.

~ Richard Brain

## Comet Lulin Observing Report by Larry Hum

(February 2009)

As any amateur astronomer knows, anytime there is a report of the visible comet (whether it be naked eye or telescopic) it is well worth the effort to go out and observe. Simply because every comet is different with its own unique personality. When I saw the January 5, 2009 Astronomy of the Day photo of a Quadrantid meteor and Comet Lulin in Scorpius, I was especially intrigued. Sounding like my actual given name, I was going to make special effort to observe it.

My first attempt to view the comet was on the morning of January 20. Getting up at 5:00 am for an early downtown medical appointment and with the sky clear, I grabbed a pair of 8x40 binoculars to see if I can spot the comet. With the 3rd quarter moon brightening up the area, I scanned the sky between the head of Scorpius and scale of Libra in search of Comet Lulin. After about 15 minutes with the dawn sky starting to brighten it was time to give up.

Cloudy skies ruined any chance for astronomy during the next new moon phase and by the time the skies were clear again it was the morning of February 14. By now Comet Lulin is just zipping through our sky is one day from closest approach to Spica. I got up at 4:00 am and headed out to my backyard only to realize that a waning gibbous moon is just below Spica. (It was  $5^\circ$  from Spica and  $6^\circ$  from Comet Lulin according to my Cartes du Ciel planetarium program.) Since I was up, I thought I'd give it a go anyway with my 8x40 binoculars and needless to say had no luck in finding the comet. 10 minutes later I was snoozing away.

With the moon and the comet moving in opposite directions, their separation increased by  $10^\circ$  the following morning. Using Spica,  $\gamma$  Virginis and  $\delta$  Virginis as guides, it took me less than a minute to spot Comet Lulin in 8x40 binoculars. The comet was far dimmer than I expected, nowhere near naked eye as earlier predictions had hoped that it would be. It was also somewhat diffused and could be very easy to miss if one was just casually scanning the skies.

Through a 4" SCT at 36x the comet looks like dimmer cousins of the M31 satellite galaxies, M32 and NGC 205. No tail was discernable and the inner core of the comet was not much brighter than its dusty outer shell. I quickly grabbed a couple of untracked piggy back photos of the comet with my digital camera and headed back inside as the  $-20^\circ\text{C}$  temperature was now biting quite ferociously at my fingers and toes.

The day of February 24 was snowy and cloudy but the Clear Sky Clock had predicted a 2 hour window of clear skies between 9 and 11 pm. Sure enough, at 8:45 the skies were clear so I grabbed my gear, now already setup and ready to go in my dining room, and headed outside. Although the sky was clear, the transparency was poor and that proved to be the determining factor as I was not able to locate the Comet at all.

With comet observing out, I took the opportunity to point my scope at Saturn. With its rings edge on, the planet did not look like its usual self. I liken it to the olive with a toothpick through it that comes with your Martini. No surface features on the planet were visible.

## Comet Lulin Observing Report by Larry Hum

(Cont'd)

Titan was clearly distinguishable to left of Saturn in my SCT view which would make it west of the planet in the sky. I was not able to see of the other satellites though.

The skies cleared once again on the chilly evening of February 28. With no bright stars in the near vicinity of the comet it took me a good half hour before I was able to spot the comet to the west of Regulus. The truth was that I had mis-read my charts and was looking for the comet at the February 28 0:00 UTC position. For the evening of February 28 in Canada, I should have looked for the comet in the February 29 0:00 UTC position.

This time the comet appears a bit larger than it did two weeks ago. Again no obvious brightening in the nucleus was visible at 36x or 110x. As well, there was no discernable tail. I spent most my time taking photos of the comet, experimenting with various settings until all my batteries were completely discharged.

After that I turn my SCT to Saturn. This time I was able to spot three of its inner satellites in addition to Titan.

Hope everyone has had a chance to go out and observe both Comet Lulin and Saturn.

~ Larry Hum

## February 2009 Meeting Minutes

- Vice President David Cotterell presiding.
- 14 members present.
- Observing night Feb. 20/21.
- Meteorite sales at the Automotion Museum in Bayview Mall have raised \$225.00 towards the purchase of a telescope for IYA 2009.
- Several Belleville members attended the lecture by Sara Seager of MIT held at Royal Military College in Kingston on January 15.
- This month's observing challenge by David Cotterell --- transit of Saturn's moon, Titan, EST 5:53 a.m. Feb. 24. Check Page 338 of Observer's Handbook for additional transits.
- Bob Mindenhall showed some really good shots of Kennedy Space Center/space shuttle apparently acquired by an employee of the facility.
- Lionel Enright did a talk on an article from March 2009 edition of Discover magazine.
- Watched Part 5 of "From the Earth to the Moon" series entitled "Spider."
- Watch for Comet Lulin's closest approach to Earth on Feb. 24 (near Saturn)