



Regulus



The Newsletter of the Kingston Centre of the Royal Astronomical Society of Canada – May 2005

Coming up...

Special Presentation

Monday May 2, at 7:30 p.m Chernoff
Hall Auditorium

David Levy - "I'm Dreaming Of A
Moon Shadow: My Adventures With
Eclipses "

RASC Regular Meeting

Queen's University
Stirling Hall Theatre D

Friday May 13, 2005 at 7:30

Laura Gagné – "Sirius dating in
Egypt" and

Stephen Gagné "Reading the weather
for observers."

Friday June 11, 2005 at 7:30

Science Fair Winners

KAON Public Observing

Queen's Observatory
Ellis Hall

Saturday May 14 9:00-11:00

Saturday June 11 9:00-11:00

AstroYak

Friday May 27 7:00 pm

Friday June 24 7:00 pm

at the home of Kevin Kell and Kim
Hay, 76 Colebrooke Rd.

Members Observing

Arden Floating night: **Apr. 29 Apr. 30**
May 6 or May 7.

At the home of Ken Kingdon **June 18.**



*Kateri Massey-Allard of E.S.C Marie-Rivier, first place winner
of the RASC-KC special award at the Frontenac Lennox and
Addington Science Fair for her project "IMPACT
À L'HORIZON".*



*Desirée Dusharm and Zoë Kopp of James R Henderson Public
school, second place winners of the RASC-KC special award.
Their project was called, "The Moon and Our Weather".*

Kingston Centre of the Royal Astronomical Society of Canada
Box 1793 Kingston Ontario K7L 5J6

<http://www.rasc.ca/Kingston>

infoline: 613-377-6029

email: kingston@rasc.ca



President's Tid Bits

By Kim Hay

A few issues ago, I had mentioned a request about volunteering. Well, I took myself up on the challenge, and volunteered to judge the RASC-Kingston Centre's Special Award for Astronomy at the F LASF (Frontenac Lennox-Addington Science Fair).

I had arrived before 8:30 am on April 9 to the location of the Science Fair, and McCarthur College. From the judging room upstairs, you can look out the windows, to the projects set up on the floor. Many rows of science fair projects and hard work were laid out below, and ready to be judged for the second day starting at 9:00 am, since judging started the day before.

We started the day with a briefing on what needs to be done for those who were judging Special Awards, to yield for the Category Judges, as these judges had 20 minute appointment times with the students. This left the last 10 minutes of each half hour for Special Judging, so you really had to know where the projects that pertained to your Specialty were, and keep an eye on an opening.

The time came to judge; the judge's room cleared out and the floor below became a hubbub of activity. The students, though nervous, were confident of their projects and eager to share their results with the judges, and others who had questions on

the projects.

I had first needed to walk around the complex and look at all the projects to see which ones fell into our Astronomy and Related Sciences category. Though I had gone through the list, the title does not always explain the project fully.

Many of the projects were very good, lots of excellent presentations, and some where of the "fad" of the day, "Teeth Whitening". One particular project dealt with pesticides and common household products for killing weeds. I had learned a thing or two at this project and will have to try the vinegar treatment this year on the weeds.

As the morning wore on, I had found 3 particular projects that fit the bill. I waited and took my turn and had the students present their projects. I asked several questions, possibly asked if they may try something else in conjunction with their current project, and they agreed it might be a good idea. The key was to remain unbiased, upbeat and encouraging the students.

Special Awards, had to be handed in by 11:00 am, and I did this. I am pleased to announce that our 1st place Winner of the RASC-KC Special Astronomy Award was Kateri Massey-Allard of E.S.C Marie-Rivier for her project "IMPACT À L'HORIZON".

Kateri had won a 3rd prize in 2002 Science Fair from the RASC-KC. It is nice to see that she has maintained an Astronomy theme over the years.

This year, Kateri has won a Student Membership in the RASC-KC, along with a current issue of Sky News and a copy of April's issue of Regulus.

Our second prize winners were Desirée Dusharm and Zoë Kopp of James R Henderson Public school. Their project was called, "The Moon and Our Weather". They received a copy of "The Beginner's Observing Guide" by our very own member Leo Enright, and a binder card on our Solar System. Their certificates will be mailed to the school, as they both will receive a Certificate of Accomplishment.

A letter has been sent to each of the winners inviting them to come to the June meeting and present their Science Fair projects. I will keep you posted on if they accept our invitation.

This was truly a great experience for me. It is amazing that when you volunteer for an activity that you may find yourself taking on a new project, but that is the great thing about volunteering you can learn something new and expand your horizons.



Astronomy Day Report

Susan Gagnon
AstroDay Chair

Astronomy Day weather could not have been better. Members began arriving close to 8:30 am, a solar site was chosen for 4 scopes, and we were off to the races.

The Isabel Turner Library meeting room was just the right size. There were plenty of windows but each had a shade that doubles as a projection screen. Since we were to concentrate on the presentations this year we cut back on displays. We still seemed to have a lot of stuff though and there was plenty for people to look at. Colourful posters, a new light pollution abatement display, an updated benefits of membership, meteorite/impact display, photos and observing logs filled the tables. We also had what I believe was the best handout selection yet. There was at least one handout related to each talk. Just a reminder of the talks...

Solar Observing, Lunar Observing, Observing Equipment, Charts, What's up tonight?, and Binocular Observing. We also had two magazine subscriptions to give as door prizes, Astronomy Magazine and SkyNews.



Solar observing outside the Isabel Turner Library

How did it go? Solar Observing was very successful. The choice of set up spot was perfect to catch the attention of the public. There were hardly ever fewer than 3 members at the scopes to guide the public safely through the observing. The solar crowd set out camp chairs and created a relaxed inviting atmosphere.

Inside the attendance was much less; presentation audience numbers ranged from one to eleven. We think that this was partially due to our room location which was somewhat isolated. Another year a room closer to the entrance may improve things. Those of us who attended are still thinking about this. We needed the quieter spot for the talks. But then we lose traffic. Also 90% of our conversations



Kim explains the wonders of the universe to a future astronomer.

and contacts involved a great exchange of information and chance for people to ask questions. This minimal number / maximum exchange may be a better equation than "seeing" 300 people at a mall. It is also a great spot for people to have a go at the brief presentations. Everyone enjoyed the new hours... much shorter than the mall, fewer restrictions. Evening observing was also a hit as usual. Popular targets were the Moon, Saturn, Jupiter, Orion and an Iridium flare. People get so excited!

It is still early for feedback from other

volunteers, it is now just the Sunday after and this is rushed to meet the newsletter deadline. I ask all who attended to think over what worked and what did not. My impressions in a nut shell, Solar: big success, Evening: big success, Presentations: big success. Location: too different from other years to make a quick judgement.

Thanks to all of the members who came out to take part: Kim, Kevin K., Hank, Leo, Laura and Jessica, Doug, Norm, Ken, Mark, David, Kevin F., Peggy, John. If I missed anyone I am sorry, there were so many of you! This was a great turnout. Also thanks Steve for the advertising. I invite others to send their reviews to *Regulus*...what did you think of the effort?



Members Observing
Ken Kingdon

May Members Observing Night

Trip to Arden, our top local site within an hour's drive... with excellent horizons all around, and no interfering lights. Even the Coma Galaxy Cluster is easily visible. This is the final deep-sky outing for the next few months... and just before the Mosquitos arrive!! Perhaps the best outing of the year. Don't miss this one!! 4-weekend days floating (1st clear night of these choices):

Fri, Apr. 29 or Sat, Apr. 30 or Fri., May 6 or Sat., May 7.

Time: plan to arrive on-site about 8PM. Stay as long as you wish. Privy on site.

Directions: From the main intersection in

Tamworth, drive north on the Arden Road (CR #15). Proceed 25 km to Pit Road (it's opposite a tall cell-tower). Turn right (east) onto Pit Road, and drive to civic #1453. Set up anywhere on the flat lawn (permission granted). Ken will meet other cars at the main intersection in Tamworth (by the CIBC Bank) then leave at 7:30PM sharp.

June Members Observing Night

KenFest BBQ at the home of Ken & Simone Kingdon, [xxx] Chancery Street.

Hot dogs, hamburgers, pop provided. Bring lawnchairs. Lunar and some deep sky observing. Plenty of space for your scopes in the unlit parkland at the rear of the home of Ken & Simone Kingdon.

Date: Saturday, June 18. If cloudy, the raindate will be Saturday, June 25.

Time: 4 pm onward.

Contact: if you plan to attend, please advise Ken Kingdon (xxx-xxxx) by the Wednesday before. Guests are welcome.

Directions: drive 300m north from the intersection of Taylor-Kidd Drive and Bayridge Drive, then turn west (left) onto Milford Drive. Proceed 200m to the corner where Milford Drive ends at Lancaster Drive. Turn north (right) onto Lancaster Drive, proceed 100m to Chancery Street. Turn west (left) and proceed to [xxx] Chancery Street. Park anywhere.

July Members Daytime Tour

Daytime tour to Holleford Meteor Crater
Watch the next issue of *Regulus* for details.

Please Welcome our newest RASC Kingston Centre

Members:

Rollin Schwinghamer
Kevin Foran
Carl Kaduck
David Roeder



April Regular Meeting Steve Hart

Thirty-five Centre members and guests attended the April 8, 2005 Kingston Centre general meeting at Stirling Hall. After Kim Hay opened the meeting, Susan Gagnon and Kim outlined various upcoming events.

Our guest speaker was RASC National President Peter Jedicke, who gave a fascinating talk on "Astronomy in Hawaii: Research, Outreach, Observing - and Politics". He covered so much ground that I only have space to mention a few of the points that caught my interest, such as the following: The new "random access" CCD chips that will be used to compensate for atmospheric effects on seeing, in the new Pan-STARRS Project which will perform an asteroid survey; Various methods that the Hawaiian astronomy community are using for public outreach, such as a large aperture, remotely operated telescope that is available to school groups in other time zones; Speculation on how politics in research and education institutions affects their ability to reach the public; and more yet...



Kim, Kevin and National President Peter Jedicke set up for Peter's talk

The break ran quite long, perhaps because people were catching up with a larger than usual number of interesting guests. After the break, a wine raffle and a 50/50 draw were held. Ken Kingdon then gave the "Sky This Month" presentation. After observing reports, the meeting closed with Centre executive and committee reports.

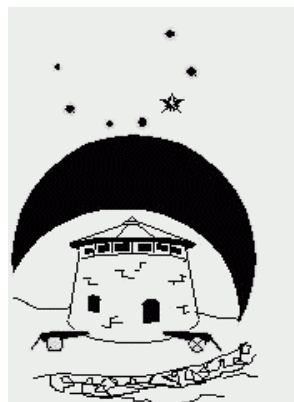


Say Hello! to the new RASC Kingston Centre Logo.

By Kevin Kell

For over a year now, the RASC-KC executive has wanted to create a new logo design for the centre, in part to separate out the 1997 General Assembly for which the first one was created, and in part to bring it more into the astronomical world.

A design idea was approved in 2005 January and Peggy Hurley returned the design concept. Some more tweaking to ensure that it would copy well, and we have a new logo.



Original logo created for the 1997 RASC General Assembly which was held in Kingston.

The new design incorporates the new National Logo design that came out in 2004, signifying our part of the larger organization.

The 60cm Robert Venor Telescope stands front and centre representing our single biggest achievement in terms of financial investment, volunteer time and organization, blood (yes there were some boo-boos during the construction) and sweat.

It stands in front of the Murney Tower Museum on the Kingston waterfront, representing both the location of the first light ceremony that we held on April 22nd, 2002 and an easily recognizable link to the Kingston Area.

The final feature is the corona of stars from the original design.



The monochrome version is being used on our business cards (now available), and stationery (letterhead, labels).

The colour version [rendered here in B&W, so see the web site for colour] is based on the actual photograph and is being used on our web site and brochures. A third variant may be necessary for other production material, like signage, banners, embroidery, patches, etc, and is being looked at.



Thanks for all your ideas and welcome to our new graphical identity!



KAON March 05

Kevin Kell

There was a good turnout at the public observing session at Queen's University Observatory at Ellis Hall March 12 (19:30-21:30 est).

A reminder that the April and subsequent months for some time will START at 21:00 EDT and end around 23:00 EDT (May, June, July, August, September at least). If you remember from the waterfront sessions, 9pm in the summer is often not dark but we can set up on the observatory deck and show the equipment off and still pick out other objects (moon, planets, daytime stars, etc).

My estimate was 120-150 people including a visit from someone? from the Trillium foundation.

Many of you know of the power adapter problems we had in February in the cold.

There is now a portable battery pack for the LX200 gps that will remain with the scope once I can find a 12vdc wall trickle charger to go with it and make it completely self contained. In any event it worked well (a 7 amp hour sealed lead acid). It has one dc power connector for the scope and a female rca connector for recharging. The whole assembly is inside an army ammo pouch for water resistance and the velcro straps attach to the telescope legs.

Peggy is off looking for some kendrick system parts for the scope: a controller, 8" primary optical glass heater, and eyepiece heater and possibly one for the 8x50 finder. If we have any \$\$ leftover.. still look for a rigel starfinder or telrad. Heck.. even if we don't have leftover\$\$ we should pay for one ourselves (centre funding).

The paving tiles on the roof are subject to moving around when people walk around, throwing off the telescope calibration, so remember that when you are operating the scope. Otto was going to think about what to do about that. We also asked about getting a red LED clock outside. Turning the hallway lights off also helped in the transition to the outside deck.



Members observing night

Ken Kinson

Equuleus Observatory is located at Stanleyville (near Perth) and is owned by Mike Wirths. This is a very large roll-off-roof observatory with ample room for its interior warm-up room, plus

TWO state-of-the-art reflectors: an 18-inch Starmaster and another, even LARGER, 30-inch Starmaster. With either telescope, a user just enters the object number on the keypad, the scope moves over to the object (singing a melody as it moves to remind us to move the ladder out of its way), then it tracks the object perfectly while people scurry around like mice to get in one, or the other, lineup. Interesting what a big piece of cheese will attract!

On Saturday April 9th, six RASC-Kingston members (Leo, Norm, Dave, Steve, Tim, Ken) went up to Mike Wirths' Equuleus Observatory. We were joined by six OAFs (Ottawa Astronomy Friends), including renowned Canadian comet-hunter Rolf Meier (discoverer of 4 comets), who shared some good comet hunting info.

The weather was wonderful - calm, clear, cloudless, comfortable, not cold, no mosquitos, etc. Seeing (ie, air turbulence) was average, so we did not push to use the binoviewer with two 500x eyepieces. Nevertheless, the views of Jupiter and Saturn were great. Io toward midnight was right on the edge of Jupiter, then passed behind Jupiter, while the Great Red Spot revolved into view. Nice, and not often seen with that kind of sharpness. Saturn was remarkable for its Moons, all arrayed like the spiral of a snail-shell. Picture this: with Saturn at the centre, moving out along this almost perfect spiral, the Moons were: Mimas, Enceladus, Tethys, Rhea, Dione, Titan, Iapetus and some stars. A very interesting

pattern, and all of the moons easy and distinctly spherical in the 30-inch Starmaster.

The "Needle Galaxy" NGC 4565 in the 30-inch Starmaster filled the eyepiece; it has a bright nuclear bulge plus a contrasting edge-on dust lane that was very black... awesome to see. The "Whirlpool Galaxy" M51 had distinct spiral structure - very easy to see, including even the connecting bridge between the two colliding galaxies. Oh, how sweet... maybe the finest showpiece tonight!

As discussed at our regular April 8th meeting, the close pair of globulars M53 plus NGC 5053 was investigated. First M53 was seen easily in the 18-inch because of its very dense, and bright core. But 1-degree away, its companion NGC 5053 is quite a different matter. Here is what we knew about the fainter member NGC 5053: its on the RASC Challenge List (#29), because it is distant and very sparsely populated. It is a Class XI globular (where Class XII is the most loose). When we examined it with the 18-inch, everyone initially had great trouble even seeing it (hey... the purpose of a "challenge" is to help make you become a better observer); I believe most did see it eventually, after a lot of guidance on where/how to look. Being so loose, professionals long-thought NGC 5053 to be just another Open Cluster, not a Globular Cluster. One look in the 18-inch and Atilla then "promoted" this object for further scrutiny with the 30-

inch, where we all could easily see the fine sprinkle of diamond-dust. After observing numerous other objects, it was break-time. We all crowded into the small warmup room, sitting in total darkness. Interesting stories, facts, fiction, and jokes were shared; this 1/2 hour period was perhaps the most pleasant part of our evening together. Then, for the final "wrap-up" object of the night, we went back out to the 30-inch scope to see something new - the Coma Galaxy Cluster (Abell 1656) which is nicely situated in Coma Bernices. It is on the RASC Challenge List (#28). This 1-degree wide galaxy cluster has an astounding 1,600 galaxies in it! But, at +400 million light years away, many galaxies simply remain invisible, even with huge aperture. But, what can indeed be seen is the larger galaxies that have "cannibalized" numerous others in this tight cluster, eventually growing to 4-times the star population of our massive Milky Way, thus becoming visible. With a 17mm Nagler (the record holder for most powerful eyepiece in the wide-FOV class), the 30-inch still only gives a FOV of just 15 arcminutes. I wondered what our first report from Mike at the top of the ladder would be. Then came his excited words: "WOW! I didn't expect THIS!!!... there are just too many galaxies!!!". I then went up and counted 33 galaxies in this very tiny FOV. All were easily seen as bright flecks of light, just like "anti-aircraft flak". Remarkable, utterly remarkable. We could have changed up to a wider FOV (but with less power) to see even more of the most overwhelming view of close galaxies that an amateur

scope can deliver... but it was 1:30AM, and time to pull the plug and get home... so we decided to be nice guys and save this incredible galaxy view for a future time when the RASC - Kingston Centre is invited up again.

The RASC - KC extends a big thank you to Mike Wirths for graciously inviting us to Equuleus.

The Kingston Centre of the RASC

Newsletter Submission Info:

I can take most common formats, although I prefer plain text. Pictures should be sent as image files in attachments separate from the articles.

E-mail: angle@personainternet.com

Post: Doug Angle,

[XXXXXXXXXX] Rd.

RR#1, Sydenham Ontario Canada

K0H 2T0

Deadline for the June issue is **May 20**

Subscriptions: Members of the Kingston Centre receive *Regulus* as a benefit of membership. Advertisements are free to members of the Centre. Commercial advertising is \$20/quarter, \$40/half page, \$100/ full page and should be in electronic format.

Contributions are more than welcome.

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Kingston Cosmic & Events Calendar

by Kim Hay

For more information, refer to the RASC 2005 Calendar, or the RASC 2005 Observers Handbook, available from Kevin Kell, or from National Office. Also see <http://www.rasc.ca/kingston>

Date	Events
April 29	Members Observing in Arden if cloudy try April 30
May 1	Last Quarter Moon 2:24
May 2	David Levy "I'm Dreaming Of A Moon Shadow: My Adventures With Eclipses." Kingston Centre, 7:30 pm Chernoff Hall, Bader Lane Queen's University
May 4	Δ-Aquarid Meteor Peak 7 pm
May 6	Members Observing in Arden if the April 29 & 30 dates clouded out if cloudy this night then May 7
May 7	Little Cataraqui Conservation Area Public Event 8:00 pm- 10:00 pm
May 8	New Moon 4:45 Ceres at Opposition
May 13	Regular Meeting Stirling Hall Theatre D 7:30 p.m. Laura Gagné – "Sirius dating in Egypt" and Stephen Gagné "To see or not to see? That is the Question. Reading the weather for observers."
May 14	KAON Observing Session- Ellis Hall Queen's Observatory 9:00-11:00 p.m. for more information visit http://members.kingston.net/~rasc/pubobs.htm
May 16	First Quarter Moon 4:57
May 19	2 shadows on Jupiter from the

	moons (7:45 and 8:pm)
May 20-23	RASC General Assembly Kelowna, BC www.rasc.ca/ga2005
May 23	Victoria Day Holiday
May 24	Moon Occults Antares 4:00 am Antares is 0.8° of moon
May 27	Astro Yak at the home of Kevin Kell & Kim Hay visit http://members.kingston.net/~rasc/indexsec.htm for directions
May 30	Memorial Day (USA) Last Quarter Moon 7:47
May 31	Mars 1.5° N of Moon 5:00 am
June 6	New Moon 17:55
June 10	Regular Meeting Stirling Hall Theatre D 7:30 p.m. Science Fair Winners
June 11	KAON Observing Session- Ellis Hall Queen's Observatory 9:00-11:00 p.m.
June 14	First Quarter Moon 21:22
June 18	KenFest BBQ at the home of Ken & Simone Kingdon,
June 21 Tuesday	Summer Solstice 2:46 am
June 22	Full Moon 0:14
June 24	Astro Yak at the home of Kevin Kell & Kim Hay
June 28	Last Quarter Moon 14:23
July 16	Daytime tour to Holleford Meteor Crater - one of Canada's finest IMPACT CRATERS