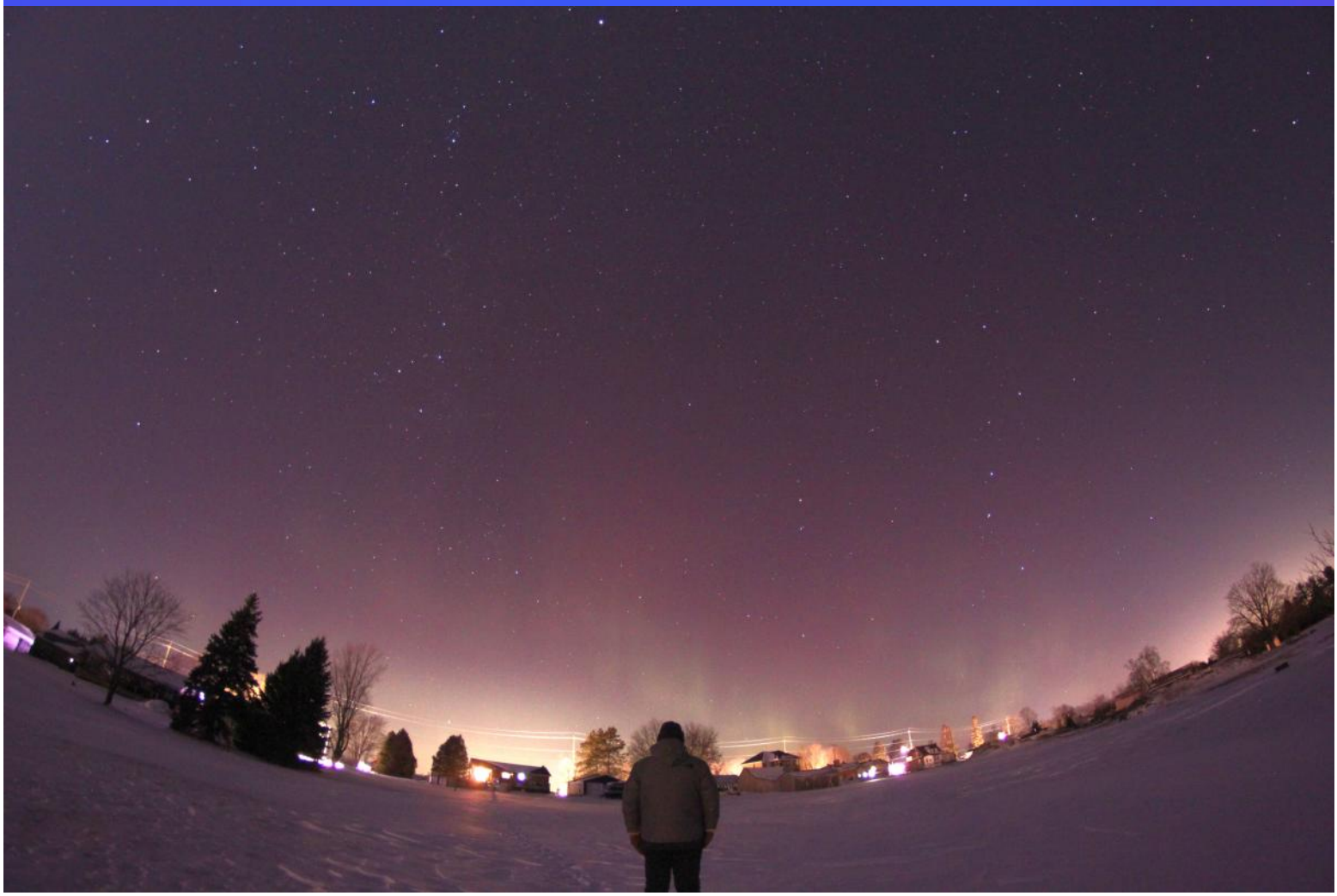
Regulus

Newsletter of the RASC Kingston Centre

Vol. 53 No. 9 November, 2026



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Centre Events for November 2026:

Nov 4: Zoom Social at 7pm.
Nov 11: Pre-meeting get together at the Portsmouth Tavern, 96 Yonge Street, Kingston
Nov 11 Monthly Public meeting 7pm at Queens Room 226, Ellis Hall, 58 University Avenue, Kingston
Nov 18: Zoom Social at 7pm.
Nov 25: Zoom Social at 7pm.
Dec 7: Zoom Social at 7pm.
Dec 9: Annual Banquet at the Kingston Mandarin

November at the Centre

Malcolm Park



Greetings, members. There is a lot to report this month, with good news from Lennox & Addington and steady progress on the General Assembly.

Lennox & Addington County

Lennox & Addington County is now a member of the Kingston Centre. The County joined in its own name in October, formalizing a partnership that has grown around the L&A Dark Sky Viewing Area near Erinsville.

That partnership has now produced an application to the RASC to designate the L&A Dark-Sky Preserve. The proposed Preserve joins the County's viewing area with the neighbouring Sheffield Conservation Area, 5.21 square kilometres in all, where zenith readings average 21.28 magnitudes per square arcsecond. The County is the applicant, and a three-party agreement between the County, Quinte Conservation and the Centre is being signed. The application is now with the RASC Light Pollution Abatement Committee.

The late Attilla Danko's 25-inch Obsession, donated to the Centre by his Estate, is on long-term loan to the County at the site, where Centre volunteers use it in free public programs.

General Assembly 2027

The program for June is taking shape. The weekend is built around four Come Together sections, The Elements, The Stars, The Cosmos and The Community, each opened by an invited speaker, and the first acceptances are in. These speakers, along with the Ruth Northcott Memorial Lecturer and the banquet keynote, will be announced when the GA website and registration go live in January.

The Call for Papers is now open on the GA website, and I would love to see Kingston members on the program. There is room for 20-minute talks and short lightning talks on the Come Together theme, and a Sunday afternoon poster session that we expect will include work by Queen's students.

Online registration and payment, run through the National Office, are being tested now. Members who cannot travel will be able to register for the live stream, with live French captions. The weekend opens with a Friday evening welcome reception, and on Monday morning we hope to take attendees on a visit to Queen's University.

Behind the scenes, work is under way on many logistical items like art design and website design.

Volunteers are always welcome. Our next planning meeting is Tuesday, November 17, by Zoom. Send me a note if you would like to join in.



The Editor's Keyboard

Roger Hill



One of the things I like to do when I travel is to visit other astronomy clubs. In 2014 on a visit to England, for instance, I visited The Orpington Astronomical Society just outside of London in Kent. They were a fascinating bunch, and when I'd signed their guestbook as living in Canada, I was made to feel very welcome. I even won their door prize for the night. When I got back to Canada, I joined their club for a couple of years. They used a Forum, rather than an email list, and it worked so well, I implemented it in the Hamilton Centre.

On another trip, I visited the Wycombe Astronomical Society, and again was made to feel very welcome. They were the only group I have ever visited that did not get together for a social either before, or after, the main meeting. I did persuade a couple of them to have a pint afterwards, but nothing more.

In October, my daughter drove me to a meeting of the Milton Keynes Astronomy Society. They were formed in 1972, when Richard Lambert, an 18 year old young man who had formed his High Schools astronomy club realized that the club would not likely last long after he graduated. So, stating that he wanted the club to more "Adult", he formed the Milton Keynes Astronomy Society in Bletchley (where the Enigma codebreakers worked in WWII), initially meeting at his parents house. The venture was a success and they quickly had to move to a bigger meeting place however, Richard developed leukemia, and at the tender age of 20, he passed away. Each year, they invite someone to give a talk at the Richard Lambert Memorial Lecture.

I was fortunate to attend this years lecture, given by the BAA's Historical Section director, Mike Frost. In chatting with him after his excellent talk about Who's Who On The Moon, he told me that he had spent some time in Hamilton, Ontario, at both Stelco and Dofasco, and had lived in Burlington!

I also chatted with several of their members, and while they had tea, coffee, and biscuits after the meeting (held in an old Rectory building that was built in 1475), they did not go for a pint before heading home. My daughter looks to be settled in the nearby town of Leighton Buzzard, so I hope to visit them again...perhaps I'll offer to give a talk (but not the Memorial lecture).

In 2014, on a trip to London, UK, I visited Greenwich Observatory. One of the things I wanted to see were the chronometers built by John Harrison that proved that mechanical watches could keep accurate time on a rolling ship. I was told that they could be found at the National Maritime Museum. So, in October, on a windy saturday in the pouring rain, I had a spare couple of hours with my son-in-law, so we visited the Cutty Sark, The Royal Naval College, got a walking tour of the area (despite the appalling weather) and went into The Painted Hall, saving the National Maritime Museum for last.

It was free to go in, but we didn't have much time. So, I asked at the front desk, explaining about my disappointment 12 years earlier. I was told that 12 years ago, the chronometers had been leant to the National Maritime Museum by the Royal Greenwich Observatory for a special programme, and that there were now back at Greenwich, where they rightly belonged, and I really should have checked before I visited. Oh, and the Greenwich Observatory will be undergoing renovations starting I a couple of weeks and it will take about two years to complete. Brutally disappointed, and really annoyed with this fellows truly appalling lack of empathy, I noticed that they were hosting the ZWO Astronomy Photographer of the Year exhibition in a different part of the building. So I decided to go there and have a look. I told the person at the entrance to this exhibit that I needed one Adult and one Senior. Adults were £12, but there was no discount for seniors. I told her that at my observatory in home in Canada, that I have about four ZWO cameras, along with a filter wheel and filters. She charged me £8 for both of us, and thanked me for using ZWO's equipment. My faith in humanity restored somewhat, the exhibition was a delight, and my son in law was amazed at the incredible images on display. We headed out into the pouring rain and went to meet my wife and daughter, as well as a couple of friends from Ottawa for an excellent meal.

As for getting my 14" RC ready for observing, I have tweaked the collimation using stars, and I have adjusted the spacing between the focal reducer and the sensor but I'm still slightly out. The effective focal length has now been reduced to 1870mm, instead of the expected 1820mm (so f/5.34 instead of 5.2). I suspect I'm no more than 1.5mm off, although my cheap digital micrometer insists it's less than a millimeter away from optimum. There is some curvature of the field, too, although the stars in the corner of the micro 4/3rds sensor in the ASI1600mm camera are round and not slightly elliptical, they are slightly larger. Still some work to do, then.

I plan on getting a newer camera next year (An ASI2600mm, or equivalent), for a few reasons. The chip size on the 2600 is about 1.6 times larger so it will cover more of the sky. Further, because the ASI1600 is front-illuminated and the 2600 is back illuminated, the 2600 will collect about 31% more light. Furthermore, the 2600mm offers true 16-bit ADC (Analog to Digital Converter) versus 12-bit on the 1600, a much larger full well depth, and zero amp glow. The downside is that I'll need to move to at least 36mm filters to cover the larger sensor, but 2" filters will likely be necessary for an f/5.2 system to avoid vignetting.

I will need to migrate to N.I.N.A. for image capture. I have to thank Malcolm Park for this. I could probably make my old and trusty friend APT (AstroPhotography Tool) work, but Malcolm showed just how capable NINA is due to plug-ins. I have used NINA before, but always went back to APT. Now, since so much of my setup is changing, it's time to make the move to NINA.

Clear skies to you!
Roger Hill



Thirty-two summers ago, the most important event in my academic life took place when Comet Shoemaker-Levy 9 collided with Jupiter in what turned out to be one of the most spectacular collisions our civilization has ever witnessed. It was the second most important event in my entire life; the first one, by the way, was meeting and marrying Wendee. I have written about this comet and this event many times, and until now I believed that the discovery adventure was complete.

It wasn't.

In November of that same year, 1994, Richard Thompson, then a geology student at the University of Arizona, was exploring the ancient rock structures in the Whetstone Mountains in southeast Arizona just 19 miles from where I now live. Like most intelligent children, Rich had 0developed an interest in dinosaurs as a child, and that curiosity was seriously strengthened by his reading of Michael Crichton's novel Jurassic Park, which brought the world of dinosaurs to life for him. He began a program of exploration in the Whetstone mountains, ascending up desperately steep and dangerous rises in search of fossils. He stumbled across some, and a lot of petrified wood. Noting that there seemed to be few large fossils there, he was impressed by the abundance of cretaceous sedimentary rocks in these rugged crags.

On that autumn day Rich sighted some bone chips along the side of a steep ridge. Some of these were uncommonly large. Finding more of these chips that day grew the excitement within him as he continued his hike. Eventually he reached a very rough area close to the top of the ridge. No more bone chips. At the top of the ridge he found a sandstone bluff. Over the course of Earth's geologic history since the late Cretaceous period some ninety million years ago, uplift caused layers of rock to be distorted so vastly that they became nearly vertical. The exposed layers made it nearly impossible to allow searches for more bone chips. Rich turned his head towards the right, and he suddenly encountered a large fraction of a pelvis, larger than his head. Near the pelvis, Rich saw three large ribs, and to the right of the pelvis he saw more large bone fragments. He yelled towards a colleague who was with him, "This is a megafind!"

It didn't take long before he and others at the University of Arizona's Geology department and the Desert Museum, settled on the evidence that Rich had discovered a new species of big Cretaceous dinosaur. The specimen was about 27 feet high and 49 feet long.

Eventually the genus name Sonorasaurus was officially adopted, and the particular specimen was given the species name Sonorasaurus Thompsoni in honor of the geologist who discovered it.

There is more. Jax Weldon, of Phoenix, was younger than 11 years old when he launched a campaign to have his home state of Arizona have a state dinosaur. He reasoned that Sonorasaurus Thompsoni, whose only specimen was discovered in Arizona, would help the state's tourist industry if it could become Arizona's state dinosaur.

In September 2017, Augustynolophus was declared the official state dinosaur of neighboring California. He believed that to remain competitive with California as a tourist lure, Arizona needed a state dinosaur as well, to remain viable with California, and that Richard Thompson's dinosaur would be an ideal candidate. With bipartisan support, then Governor Doug Ducey signed a bill declaring Sonorasaurus the state dinosaur on April 10, 2018.

Rich's find turned his life around. He studied mineralogy at the University of Arizona, lectured there for a large number of years, and after completing a postdoc, worked as a liaison with Congressman Raúl Grijalva in Washington.

On October 3, 2026, Rich and I drove the difficult terrain that ended with a hike up the steep and forbidding hills. The closer we got to the quarry, the eons and geologic periods faded away and we were standing in the ancient topography of Earth's Cretaceous period. We did stumble across some interesting samples of petrified wood. Because I grew a little dizzy, I did not make it to the quarry that day but I did witness the magnificent Arizona scenery that surrounds the discovery site. I imagined seeing Sonorasaurus dinosaurs stalking about, munching on the branches of the trees, and describing their history in brilliant lectures, poetry, and mathematical equations. Although Sonorasaurus resembles the famous Brontosaurus, that classic dinosaur did not survive the end of the Jurassic period. Sonorasaurus was a Cretaceous animal that died out about 92 million years ago, not quite as large as Brontosaurus but big enough, about 26 million years before the Cretaceous-Paleocene extinction event.

One final thought: although the likely Chixulub impact crater was not discovered until the early 1990s, literary artists speculated about it much earlier. A famous line from Alfred Tennyson's masterpiece In Memoriam, published in 1850, described the organic evolution of humanity that survived mass extinctions.

But trust that those we call the dead,
Are breathers of an ampler day
For ever nobler ends. They say,
The solid earth whereon we tread

In tracts of fluent heat began,
And grew to seeming-random forms,
The seeming prey of cyclic storms,
Till at the last arose the man;

In six magic words, Tennyson introduces the concept of "The seeming prey of cyclic storms" occurring over millions of years, but at the same time, in a big hurry, over a few seconds. Congratulations, Richard Thompson, for adding new and original knowledge about the evolution of our world, and bringing your dinosaur, probably the only specimen discovered so far, to life.

The Sky This Month

Rick Wagner



Any night of the week offers up a broad range of viewing wonders. A Past President of the Kingston Centre, Rick Wagner keeps an eye on the sky each month, sharing some of the best viewing opportunities as well as timings to catch your favourite night sky target at its best.

Astronomy This Month – November 2026

01 Nov – Daylight Saving Time ends
01 Nov – Last Quarter Moon
02 Nov – Europa partially eclipses Io (05:25EST)
02 Nov – Moon, Mars, Jupiter and Regulus form 12° grouping in eastern dawn sky
02 Nov – transit of exoplanet HAT-P-32b (23:52 – 02:59EST)
03 Nov – gegenschein visible around midnight from very dark sites for next 10 days
04 Nov – Europa partial eclipse by Ganymede (04:00EST)
05 Nov – S. Taurid meteor shower peaks
07 Nov – Earthlight Moon, Venus and Spica form compact group very low in ESE during morning twilight
07 Nov – zodiacal light visible before morning twilight in eastern sky for next 2 weeks
08 Nov – Callisto, Io, and Io's shadow all on Jupiter's disk (03:00EST)
09 Nov – New Moon (02:02EST)
11 Nov – N. Taurid meteor shower peaks
13 Nov – transit of exoplanet HAT-P-32b (17:52 – 20:59EST)
14 Nov – Ganymede partially occulted by Europa (02:51EST)
15 Nov – transit of exoplanet TOI-3693b (18:25 – 21:58EST)
15 Nov – transit of exoplanet HAT-P-32b (21:28 – 00:35EST)
16 Nov – Callisto partially eclipsed by Io (02:46EST)
16 Nov – Mars and Jupiter 1.2° apart, in ESE predawn sky
16 Nov – Leonid meteor shower peaks – best after midnight
17 Nov – transit of exoplanet HAT-P-32b (01:04 – 04:12EST)
17 Nov – First Quarter Moon
20 Nov – Mercury (mag -0.5) at greatest elongation west low in E SE before sunrise
20 Nov – transit of exoplanet HD189733b (19:41 – 21:30EST)
24 Nov – transit of exoplanet TOI-3693b (20:33 – 00:06EST)
24 Nov – Europa, Io and Io's shadow on Jupiter's disk (01:07EST)
24 Nov – Full Moon (09:54EST)
25 Nov – Europa partially eclipsed by Callisto (04:22EST)
25 Nov – Uranus (mag 5.6) at opposition – visible naked eye?
28 Nov – transit of exoplanet HAT-P-32b (19:05 – 22:12EST)
29 Nov – Venus at greatest illuminated extent
30 Nov – Moon, Mars, Jupiter, and Regulus in compact 6° grouping, rising after midnight
30 Nov – transit of exoplanet HAT-P-32b (22:41 – 01:48EST)

Editor's notes:
Parent stars of Exoplanets:
HAT-P-32 is also known as:
TYC 3281-800-1
Gaia DR2 356348286886230272
GSC 03281-00800

TOI-3693 is also known as:
TYC 3275-1223-1
Gaia DR2 4044330184474760 96

HD189733 is also known as:
TYC 2141-972-1
DR2 1827242816201846144

For more information on these stars, use https://simbad.cfa.harvard.edu/simbad/
And place an entry into the Basic Search box

Targets for Tonight: Pisces

Susan Gagnon



Pisces is a star hopping challenge for sure. It is a bit short on bright stars of its own but with help from Aquarius, Pegasus and Cetus, much is possible. As you may have noticed from the RA/Dec all objects are close together in an area radiating out from alpha Psc. There are no targets listed for Deep Sky Challenge, ETU, or Finest NGC. All objects listed here can be found in Cartes du Ciel.

The first two items on the table are the double stars, 77 and 86 Psc. They are not exciting pairs as far as colour contrast goes but they are nice close pairs of differing magnitude. When you track down one pair and move on to the other you may find as I did, that the view is very similar.

The only Messier is M74, a faint spiral that can still be seen with a bit of moonlight.

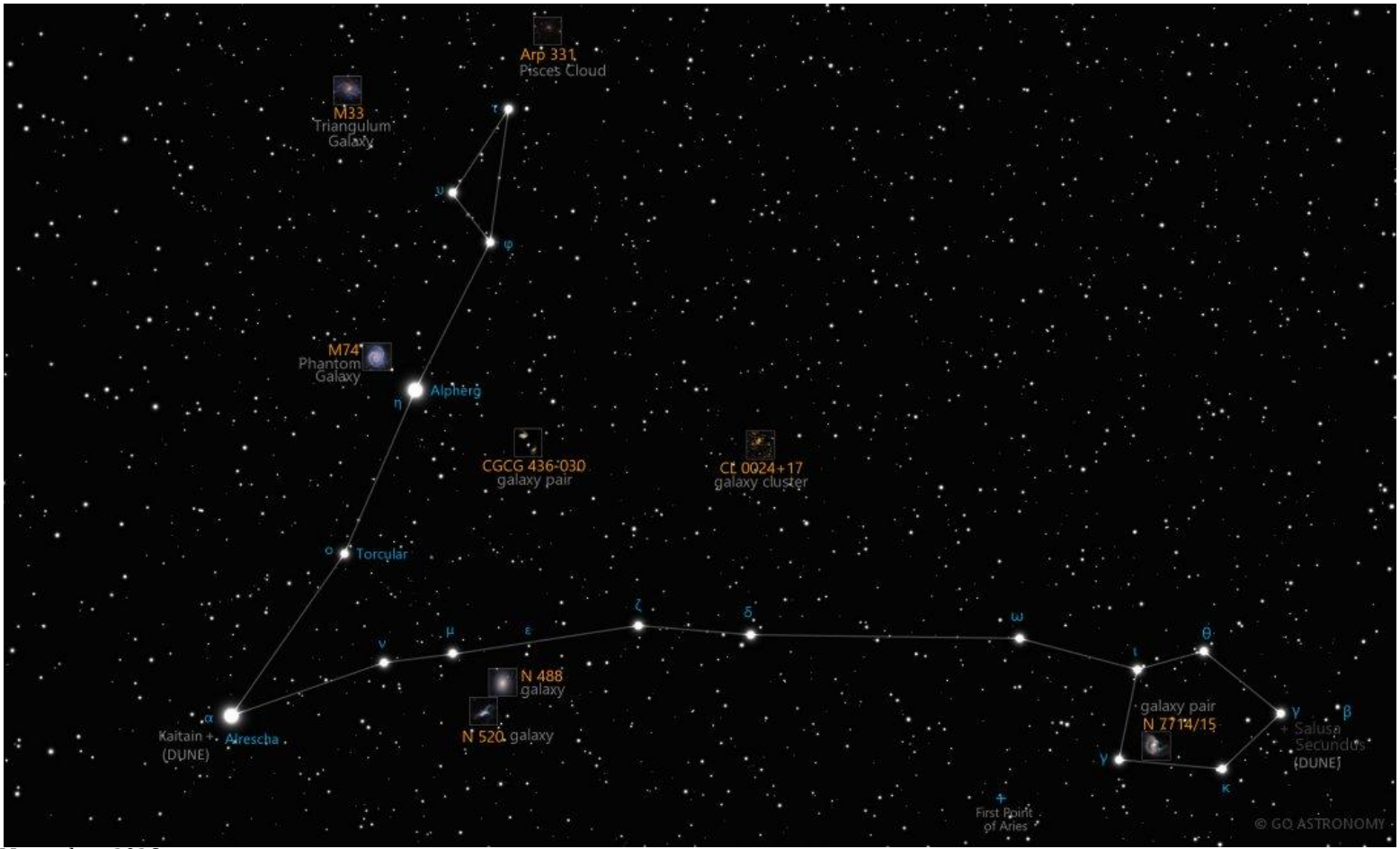
Levy galaxy NGC 474 is also very faint and part of a cluster including NGC 470. I cannot be confident as to which I saw but the central concentration of light is more pronounced in 474 in a review of photos.

NGC 488 is faint and has a difficult mottled look in the eyepiece but to help with identification, the field includes a nice line of 3 stars.

NGC 514 is very faint, near a 9.5 mag star. NGCs 524 and 718 are round galaxies and as sometimes happens, they are a bit easier to see.

NGC 524 was visible with some moon and a magnification of x73 in my 9.25inch scope while NGC 718 needed a boost to x102 to see it.

Object	Description	RA (hr/min)	Dec (degree/min)	Magnitude etc.
77 Psc	Double Star	01, 06	04, 54	7.2/6.6
Zeta Psc (86 Psc)	Double Star	01, 14	07, 35	5.5/6.5
M 74	Spiral Galaxy	01, 36	15, 47	10
NGC 474	Levy Galaxy	01, 20	03, 25	11.5
NGC 488	Levy Galaxy	01, 22	05, 15	10.3
NGC 514	Levy Galaxy	01, 24	12, 55	11.7
NGC 524	Levy Galaxy	01, 25	09, 32	10.2
MGC 718	Levy Galaxy	01, 53	04, 12	11.7





In the spirit of posting observing lists for Regulus, here is one you may remember presented to us in the fall of 2011 by its creator, Clara Scattolin... "Star Trek Observing List".

Introduction

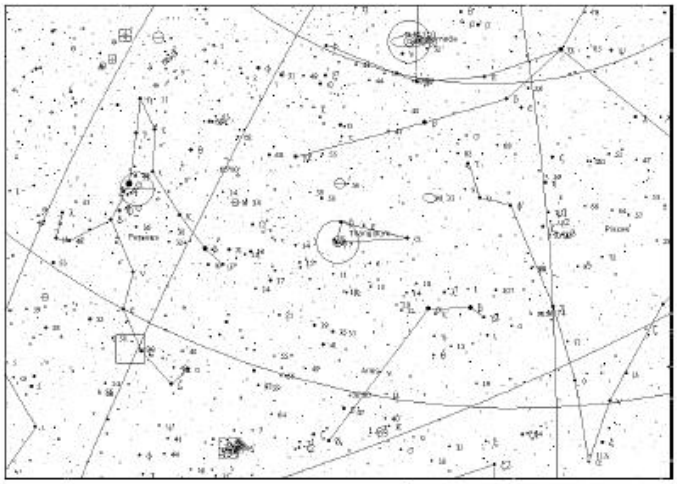
Have you ever wondered where all Gene Roddenberry's famous planets are? Have you ever wanted to see them trough a telescope? Well, here's your chance.

You might wonder why anyone might want to look at stars that are probably irrelevant. I don't know about you, but I would love the opportunity to look at a star that someone believed was a solar system, with habitable planets in orbit.

Have you ever stopped to think that maybe someone really lives on that planet? It might not be your best friend, but they could be even more evolved than we are. They might be looking for us, or they might already have all found us, and are planning a visit. Who knows!

All this is just to say, these stars have been mentioned in Gene Roddenberry's famous Star Trek universe.

Name	Catalogue	Long Lat	Visual Magnitude	Type
	Gamma Trianguli	RA:2h17m18.84s DE:+33°50'50.4"	4.01	Star A (bluish-white)



Episode	Name	Description
The Apple (TOS)	Gamma Trianguli VI	This is a planet carefully guarded by Vaal.



10

Here is the list of objects to observe. They are sorted in RA:

Name:	Catalogue number:
Andromeda Galaxy	M31
Pinwheel Galaxy	M33
	Tau Ceti
	Delta Trianguli
	Gamma Trianguli
	Mira Omicron Ceti
Acamar	Theta Eridani
Menkar	Alpha Ceti
	Epsilon Eridani
Pleiades	M45
Keid	40 Eridani
Hyadum	I Gamma Tauri
Aldebaran	Alpha Tauri
Rigel	Beta Orionis
Capella	Alpha Auriga
Mintaka	Delta Orionis
Crab Nebula	M1
Menkalinan	Beta Auriga
Canopus	Alpha Carinae
Pollux	Beta Gemini
Ashlesha	Epsilon Hyadrae
Regulus	Alpha Leonis
Wolf 359	
Merak	Beta Ursa Majoris
Cor Caroli	Alpha Canes Venatici
Cauda Hydrae	Gamma Hydrae
Dhanab al Shuja	Gamma Hydrae
Mizar	Zeta Ursa Majoris
Rigil Kentaurus	Alpha Centauri
Izar	Epsilon Bootes
Antares	Alpha Scorpio
Atria A	lpha Trianguli Australis
Barnard's Star	Gliese 699
Vega	Alpha Lyrae
Sheliak	Beta Lyrae
Alsafi	Sigma Draconis
Altair	Alpha Aquila
Deneb	Alpha Cygni
Helix Nebula	NGC 7293

Equipment Notes - Kevin Kell

20cm HVA Dobsonian telescope donation - 2026

Earlier this summer the Centre received telescope donations from the family of Hein van Aspersen, longtime member of the RASC-KC. I talked about the first telescope, the 3.5" Questar in the September 2026 issue of Regulus.

This is a 20cm (8") dobsonian mount telescope built by Hein around the time he joined the Centre, in 1984. It is a very well built (heavy) telescope. The OTA weighs in at 15kg (32lbs) and the mount at 17kg (39lbs). Features to note are the slo-motion controls, the bearings in the RA and Dec and the setting circles displayed on the base.

The primary mirror looks good.. nice and clean. The scope has not been taken out and used yet but I hope to be able to evaluate the optics soon.







Telescope Package for Sale

Suitable for beginners
Celestron Next Star 6SE

- Optical Tube with 6 inch aperture
- Star diagonal 1.25 inch
- Steel Tripod with Center leg brace, accessory tray and base unit
- Computerized hand control with over 40,000 object database
- Celestron SkyPortal WiFi Module
- RS 232 Aux Cable
- Rigel QuickFinder

Eyepieces:

- 10 mm Celestron
- 13mm Celestron
- 15 mm Tele Vue
- 25mm Celestron
- 32mm Tele Vue

Filters and attachments:

- Barlow x2 Svbony (doubles magnification)
- Focal reducer 50% Svbony (doubles field of view)
- Filter for moon viewing (reduces transmission to 25%)
- Solar filter from Celestron (allows safe observation of sun)
- Dew shield from Celestron
- Bahtinov Mask (3D printed) for precision focusing

Factory Instructions:

- The Sky Level 1 Astronomy Software (Disc in box)
- Non-remote telescope control software (firmware update in manual)
- Book: NextStar User's Guide II, 2017 by Patrick Moore.

Asking $1400
Contact Bruce Elliott: bruceelliottb@gmail.com
Please direct any questions to Janet Elliott:
janet.l.elliott@gmail.com



Member Image Gallery

Greetings!

It is that time of the year to go through your 2026 images for submission to the RASC-Kingston Centre 2026 Member Image Gallery.

This year we have added astronomical sketches to the types of submissions so the talented artists in RASC-KC can be included.

I am requesting your best or favourite image (photo or sketch) from 2026, along with a paragraph description of "why it is your best" and some "technical specs" (name of object, equipment used, processing techniques, etc).

Examples of submissions from previous Member Image Galleries from 2020 to 2025 can be found at https://kingston.rasc.ca/2025-member-image-gallery/.

The Fine Print…
1. Your image was created in 2026.
2. The image is your own work.
3. Only one submission per member.
4. You are a member in good standing of The RASC-KC as of Dec 31, 2026.
5. Preferred image format is JPG or PNG, resolution no more than 2K x 2K (it will be shrunk to 1080p for the publication)

Email submissions to Brian McCracken at doc963@gmail.com , preferably with a subject line of "RASC-Kingston Centre 2026 Member Image Gallery" or something close.

I will confirm reception of your submission the same day or next.

Deadline for submissions is Monday noon, January 4, 2027.

If you have any questions please let me know.

Thank you!
Brian McCracken

So far, the weather has been more than co-operative for observing the sky. Clear nights and increasing hours of darkness, can lead to sharing your enthusiasm with the younger people which might inspire them for years to come. If you are in the market for new equipment, check the Smart 'scopes. Many are providing quality optics at an amateur price. They are diverse, so check which is best for your family.

This month Mercury will be too close to the Sun for viewing for about half the month. When it does emerge, it will be in the morning low in the ESE. Venus will be low in the SE in the morning twilight. Mars will be high in the S in the morning sky all month. It will transit near dawn. Jupiter will rise in the ENE before midnight and transit near dawn and Saturn will be in the ESE at dusk, transit around 9 pm, and set in the W after 3 am.

November has two meteor showers! Dress warmly in layers, and have an air space between you and the ground. Raise your head slightly, looking away from where the meteors appear to start. Looking away allows a longer time for you actually see some meteors before they are consumed. The Northern Taurid Meteor Shower peaks overnight of the 11-12. Best views around midnight. This is not an intense storm but is known for bright, slow moving (relatively speaking) Fireballs. There are only 4 or 5 an hour so patience is needed. These may be spawned by the Asteroid 2004 TG10. The radiant is near the red star, Aldebaran. If you do see a fireball (brighter than Venus), people want to know. Make note of how high it was (from your point of view), what time it was, what direction it appeared to be going and a guess at how bright it was. They will want an address, too. If it was big enough, there may be a search for the meteorite. If one should land at your feet, do not pick it up — very cold. Please contact the American Meteor Society and let the government collect it. They pay market value.

The second meteor shower this month is the Leonids, early morning of the 17th. They are active all month at about 10 -15 meteors per hour. This shower is fed by 55P/Tempel-Tuttle and does have 'clumps' which can produce meteor storms (over 1000 meteors per hour). These meteors are very fast (about 70 kms per second) and bright often leaving persistent glowing blue-white trail. For both these showers, no binoculars or telescopes needed, just dark adapted eyes. If you see a meteor this month and it's not the peak, it might still be from one of these showers. Figuring out what you actually saw can be fun.

We start November with the last Quarter Moon. As the Moon ebbs or sets, Gegenschein might be seen high in the S over the next two weeks. On the 2nd both Mars (1.1 degrees) and Jupiter (0.5 degrees) will be N of the Moon. Two shadows will be visible on Jupiter on the 4th and Mercury will be at Inferior Conjunction (in a line between Earth and the Sun). By the 7th, Venus will have moved to 1.1 degrees N of the Moon and Zodiacal Light may be seen in the E before morning twilight for the next two weeks. If you have a telescope, the discs of Callisto and Io will be visible on Jupiter (2:24 am). New Moon is on the 9th, Venus appears stationary on the 11th, Northern Taurid Meteor shower on the 12th with Mercury appearing stationary on the 13th. Mars will be 1.2 degrees N of the Moon on the 15th and the Leonid meteor shower on the 17th along with First Quarter Moon. The Lunar Straight Wall, Plato Sunrise rays (9:00 pm), and Eyes of Clavius (9:30 pm). The 19th has Venus 1.8 degrees N of Spica (bright star in Virgo). Mercury will be at its greatest Western elongation on the 20th and rise in the E before Sunrise. There will also be two shadows on Jupiter at 7:33 pm. Full Moon (Rivers Freezing Over) will be on the 24th along with Mars 1.8 degrees N of Regulus (the brightest star in Leo) and Europa and Io discs are visible on Jupiter (12:51 am). On the 29th Venus will be its greatest illumination. Uranus is at its brightest (mag 5.6) and might be seen 'unaided' in a dark sky. Jupiter, the Moon, Regulus and Mars are within 6 degrees of each other on the morning of the 30th.

Clear Skies.



Minutes of the October Public meeting — Elena Zanetti

Wednesday, October 14, 2026

Ellis Hall, Room 226, Queen's University, Kingston

The meeting began at 19:06 EDT with 29 in attendance.

Malcolm welcomed Kingston Centre members and guests and announced French subtitles are being added to the YouTube recording as a test.

The RASC Kingston Centre acknowledges that we are on the traditional homeland of the Anishinaabe, Haudenosaunee, and the Huron-Wendat, and we thank these nations for their care and stewardship over these lands.

Our speaker is James Barron, a Queen's University PhD candidate, on 'The Lives of Magnetic Massive Stars'. James researches the magnetic fields of massive stars, analyzing the data and observations obtained with space and ground-based telescopes, with the bulk of the work done with the Canada France Hawaii telescope on Maunakea. Sharing images and videos, James is studying how magnetic fields are generated, what the properties are and how they alter and impact the lives of stars. This begins at 6:10 on our YouTube video.

Rick Wagner – The Sky this Month

Local Events
22 Oct – Alice Curtin – Fast Radio Bursts
29 Oct – Aswathi Balagopalv – Diffuse Emission in IceCube
01 Nov – DST Ends
05 Nov – Matt Frosst – Barred Galaxies in Cosmological Simulations
12 Nov – Gibwa Musoke – Cosmic Rays
14 Nov – QU Obs'y Open House

First Light Telescope Conference
16 Oct – 8in Binoscope (21:00)
17 Oct – Specialized Instruments (11:45)
17 Oct – Spectropscopy (12:45)
17 Oct – Sketching at the Eyepiece (16:30)
18 Oct – AI in Astronomy (13:15)
18 Oct – RonchiML (17:15)
18 Oct – Tabletop to the Stars (19:00)

BAA Events
28 Oct – BAA Mtg & AGM

AAVSO
14 Oct – Spectroscopy SIG Mtg
19 Oct – Exoplanets SIG Mtg
07 Nov – Annual Mtg
12 Nov – Spectroscopy SIG Mtg

Sky Events
18 Oct – First Quarter Moon
21 Oct – Orionid meteor shower peak
26 Oct – Full Moon (00:12EDT)
26 Oct – partial eclipse of Io by Europa (04:08EDT)
01 Nov – Last Quarter Moon
02 Nov – Io partial eclipse by Europa (05:25EST)
04 Nov – Europa partial eclipse by Ganymede (04:00EST)
05 Nov – S. Taurid meteor shower
09 Nov – New Moon (02:02EST)

Exoplanets
15 Oct – HAT-P-32b (11.4mag, 22mmag, 20:05 – 23:12EDT)
16 Oct – WASP-80b (11.8mag, 2w9mmag, 20:26 – 22:34EDT)
17 Oct – HAT-P-32b (11.4mag, 2w2wmmag, 23:40 – 02:48EDT)
20 Oct – HAT-P-32b (11.4mag, 22mmag, 03:16 – 06:24EDT)
30 Oct – HD189733b (7.7mag, 24mmag, 21:36 – 23:15EDT)
30 Oct – HAT-P-32b (11.4mag, 22wmmag, 21:16 – 00:23EDT)
01 Nov – HAT-P-32b (11.4mag, 22mmag, 23:52 – 02:59EDT)

Comets
161P/Hartley-IRAS, srn Del, 11mag, transits shortly after dusk
220P/McNaught, ern Cet, 12mag?, late evening to dawn

T CrB
Sets before midnight
Still faint

Major Planets
Mercury too near the Sun
Venus too near the Sun
Neptune (mag 7.8) up all night
Saturn (mag 0.5) up all night
Uranus (mag 5.6) rises early evening
Mars (mag 1.0) rises just after midnight
Jupiter (mag -1.8) well up in SE by morning twilight

Small Bodies
15 Oct – 0715UT (3767) DiMaggio 16.7 TYC 0741-00449-1 9.8 6.2 1.4s
28 Oct – 0856UT (18895) 2000 GJ108 16.2 UCAC4 458-003365 10.8 5.0 1.6s
29 Oct – 0640UT (35286) Takaoakihiro 18.2 TYC 4697-00191-1 11.3 6.6 0.7s
02 Nov 1014UT (305) Gordonia 13.8 TYC 0822-00863-1 11.1 2.3 2.2s
11 Nov 0253UT (9996) ANS 17.6 UCAC4 525-023121 10.8 6.9 1.9s

Stefan Jackson recently purchased an Insta360 – X6 camera and has found great video quality. Stefan shared videos of Starlapse and Startrails using auto settings. For nighttime photography, adaptions made include a tripod purchase, a buck voltage converter attached to a 12v lithium ion battery and set to 5 volts, allowing the camera may be run all night. With a newly purchased ZWO Seestar, Stefan described his set up in their backyard observatory, used a leveling base, a Sky-Watcher wedge, and 3D printed the Vixen attachment to offset the weight. A cable with a magnetic attachment was added, so if anything snags, the cable pops off and nothing is damaged. He shared images taken with diffraction spike filters wand contact Stefan if you would like to purchase any.

Shelley Jackson shared images of the Dark Shark Nebula (LDN 1235) and Rotten Fish Nebula (LDN 1251), taken with a Samyang 135 camera lens and a ZWO ASI2600MC camera on a Sky-Watcher GTi.

Laurie Graham shared images taken with her Vespera Pro, a multi-night observation of the Helix Nebula (NCG 7293) and wanting to compare images as time progresses. Laurie plans to add a dual band and H Alpha filter in the future to these targets. In NGC 7331, Laurie captured the supernova, and the Triangulum Galaxy (Messier 33).

Mike Hanes shared successful images of NGC 7331 before (taken a few years ago) and after supernova 2026aaiV taken with an 8" Ritchey-Chretien.

Rick Wagner has built equatorial wedges for the club's Seestars and discussed advantages of using them, including getting the readings down to 0.1 and zero degrees. When taking 30 second exposures, 90% are storing successfully. Brian McCracken announced the 2026 Image Gallery. For members of our Kingston Centre only, please submit your image taken in 2026, one per person, Brian will combine them in a report.

The RASC Kingston Centre October edition of the monthly newsletter Regulus is available. It can be found on the RASC Kingston Centre website Kingston.rasc.ca.

Other than meeting nights, we host Wednesday night Zoom Socials, with an invitation posted to the Centre's email list. On Facebook we are @RASC Kingston Centre, YouTube channel @RASC Kingston Centre. Join our group at secure.rasc.ca/membership.

Next meeting, in person at Queen's, will be our AGM on November 11, 7 pm. An email with attachments for your review will be sent to members announcing the meeting. Malcolm thanked all for attending and the meeting ended at 21:10 EDT.

Elena Zanetti, Secretary.

This month's front cover is an image of the editor looking at a display of Northern Lights outside his observatory on January 20, 2026. It will likely be his entry for this years Member Image Gallery.

About Us

The Royal Astronomical Society of Canada, founded in 1868, is Canada's leading non-profit astronomy organization, connecting over 5,000 passionate amateurs, educators, and professionals. Across Canada, 30 local Centres deliver community programming alongside national initiatives.

The RASC Kingston Centre, Kingston's Astronomy Club, was established on June 2, 1961, is the region's local astronomy hub.

What We Do:

Public Outreach & Education: Host public sessions, support local schools, youth groups (Cubs & Guides), and regional events.

Partner with Queen's University Observatory Open Houses on the third Saturday of each month at Ellis Hall.

Science Fair Support: Award an annual astronomy prize at the Frontenac, Lennox & Addington County Science Fair (FLASF).

Observing & Mentorship: Offer private observing sessions and technical assistance with astronomical equipment.

Meetings & Gatherings:

Monthly on the 2nd Wednesday of each month (7:00–9:00 PM ET) March–June and September–December at Queen's University;
In-Person: July and August at Lake Ontario Park starting at 4pm.
Zoom Only: January and February.
Weekly Informal Chat: Casual weekly videoconferences for members and guests.

Membership Benefits:

National Benefits include the annual Observer's Handbook; the bimonthly Journal of the RASC (digital); Monthly national RASC Bulletin (digital).

Kingston Centre Benefits:

Monthly Centre newsletter (Regulus); Equipment loan program; and access to private observing sites and club events.

Directors for 2025-2026**:**

Laurie Graham, Roger Hill, John Hurley, Kevin Kell, Bruce Murray, Malcolm Park, Elena Zanetti

Officers for 2025-2026**:**

President	Malcolm Park
Vice President	Laurie Graham
Treasurer	Bruce Murray
Secretary	Elena Zanetti
Regulus Editor	Roger Hill
NC Rep	John Hurley
Equipment Coordinator	Kevin Kell
Librarian	Kim Hay
Equipment coordinator	Kevin Kell
Science Rendezvous/FLASF	Bruce Elliott
Annual Member Image Gallery	Brian McCracken
Queen's Open House coord	Laurie Graham
Web Team	Kevin Kell, Walter McDonald and Malcolm Park
Social Convenor	Mike Hanes
Email Chat List Moderator	Kim Hay
Facebook Team	Kim Hay
Membership Coordinator:	Kim Hay
Fall'N'Stars KC coordinator	Mike Hanes
Honourary President:	David H. Levy

The **Royal Astronomical Society of Canada Kingston Centre** was provincially incorporated as a Not-For-Profit Corporation in September 2005 and has been a registered Charity with the Canada Revenue Agency since September 2006. Our CRA Registration: 827905720RR0001