

OSFS Statement

October 2020, Issue 500, Vol 45, Number 10 Artist's conception of a rogue planet.

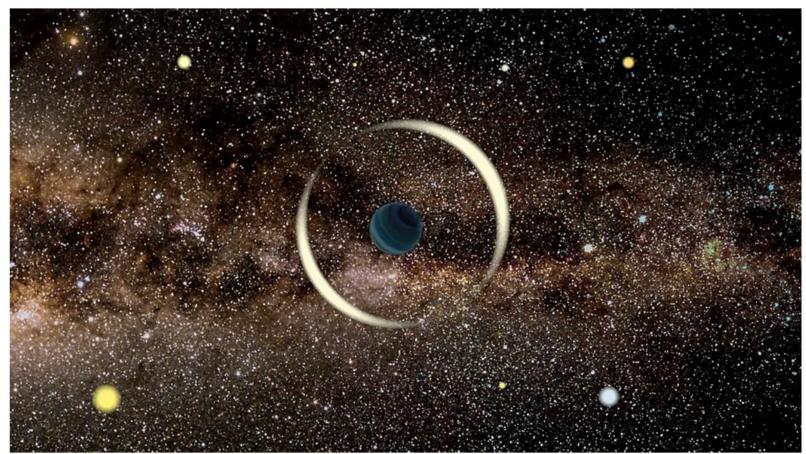
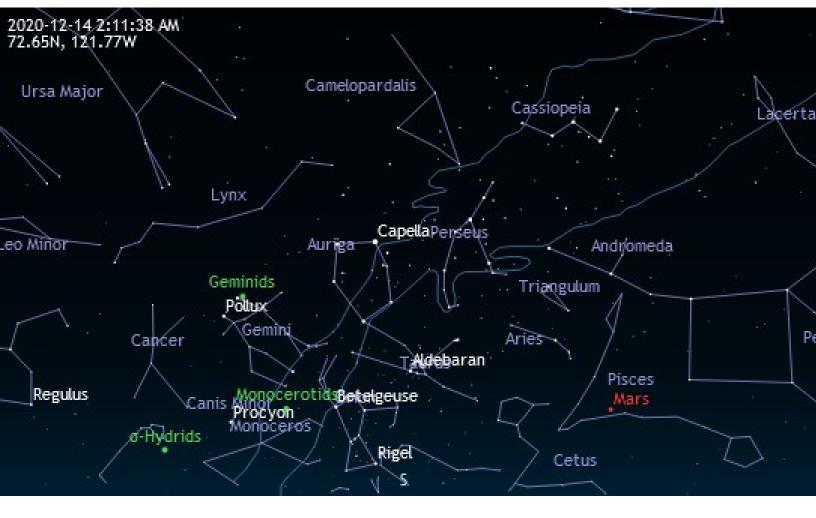


Image: Jan Skowron/Astronomical Observatory, University of Warsaw Not to scale; the planet is far smaller tham the star behind it and the ring fainter.

An animation of such an event should be appended to this issue.

GravLens.mp4



Geminids(GEM) meteor shower will be active from Friday, December 4 2020 until Sunday, December 20 2020. Its peak day is Monday, December 14 2020, according to

information published by the International Meteor Organization. For more information, check out the meteor shower calendar 2020.

Source: https://www.vercalendario.info/en/where/meteor-shower-gem-canada.html (or just google "geminid")

In **2020**, the peak of the **Geminids** coincides with a New Moon, so conditions are ideal. It is one of the most active showers of the year, and in some years is the strongest, with a peak rate of around 100 meteors per hour. It is the one major shower that shows good activity before midnight.

The best time of night to watch for

Geminid meteors is around 2 a.m., when the the shower's radiant point – near the bright star Castor in the constellation Gemini – is high in the sky. If you're not one to stay up late, you can watch for meteors during the evening hours.

Event Coordinator – Hopefully there will be another OSFS dinner someday. We have a monthly OSFS newsletter called The Statement. If you would like to be on the e-mail list contact the editor@ottawasfs.ca

Editor's Blather: We lost couple of past members this year and for various reasons they have both had very delayed obits.

The **Odyssey Writing Workshops** Charitable Trust has announced its Winter 2021 live online classes with students participating in discussions, asking questions, and learning from an instructor responsive to students' concerns.

One Brick at a Time: Crafting
Compelling Scenes by novelist Barbara
Ashford; January 4 - February 1, 2021 Stories
and novels are made up of scenes, so if your
scenes are weak, your piece has little chance
of success.

Emotional Truth: Making Character Emotions Real by publisher Scott H. Andrews January 6 - February 3, 2021 The most common weakness in submissions is the failure to convey character emotions in a powerful way.

Worldbuilding in Fantasy and Science Fiction by author Patricia C. Wrede January 7 - February 4, 2021 A well-chosen, compelling world can capture the reader's imagination and enhance every aspect of a story.

The application deadline for all three courses is December 7, 2020.

OBITUARIES:

Charles R. Saunders,

father of Black 'sword and soul' (July 12, 1946 – May, 2020)

Generations of readers know him for his fantasy books set in Africa, setting Saunders apart in a genre dominated by classic books with racist undertones. (Jon Tattrie/CBC)

His first book, Imaro, was published while he was living in Ottawa and attending OSFS in the 1980s.

https://www.thechronicleherald.ca/lifestyles/local-lifestyles/ns-writer-saunders-remembered-for-journalism-groundbreaking-fantasy-496368/

https://www.cbc.ca/news/canada/novascotia/charles-r-saunders-obituary-blackjournalist-sword-and-sorcery-1.5723704

Thomas Wray,

Mathematician, cartographer, gadfly. (April 26, 1941 - August 2, 2020)

Longtime member of OSFS. Born and educated in Ireland. Worked for the Geological Survey of Canada.

COMING EVENTS

A Grand Conjunction of Jupiter and Saturn on December 21. Might be worth watching the two dancing for the previous week or so. Saturn's rings are tipped at a good viewing angle but you need a fairly powerful telescope.

Watch to the west just after sunset.

LOC

Dear OSFen:

Hey, it's issue 499 of the Statement, which means the next issue is no. 500! Hope something special is planned for that issue. (Well there was but 'best laid eggs and all that'. Ed.) In the meantime, to the issue at hand...

Given recent events, like the passing of Dave Prowse¹ (yesterday) and Ben Bova (today), I see everyone's favourite Timelord on the front cover, and pray for his continuing health. Tom Baker is someone we need to see smiling in this *annus horribilus*, to quote the Queen.

My letter... I am hopeful that we can get to something approximating a normal life in 2021, but I shall not be surprised if that doesn't happen for another year or two. Enough time has gone past that I might be able to take part in some book launches, not that I have ever written something in a professional nature, but that I have edited or copyedited/proofread. So, if there is anything coming up from Shirley Meier, Nancy Kilpatrick, or Sharon Lee & Steve Miller, there's a chance I had a look at it, and recommended some changes. It's been great to combine my profession of being a proofreader/copyeditor with my enjoyment of science fiction. Took long enough...

As always, we stay inside, we wear masks if we have to go out, and we self-isolate. I hope everyone else will do that...with the passing of Ben Bova today, due to COVID-19-related pneumonia, I have seen a growing list of fans who we've lost to the coronavirus, and it gets sadder every day. Please, all, take care of

yourselves, and we will make it on the other side of this pandemic. See you then. If I don't say it elsewhere, a happy Christmas and New Year's to you all.

Yours, Lloyd Penney.

<continued>

¹ Complications from COVID-19 Played the physical form of Darth Vader in the original *Star Wars* trilogy.

Warped Starlight Reveals Smallest Rogue Planet Known to Science

https://gizmodo.com/warped-starlightreveals-smallest-rogue-planet-known-to-1845549324

Rogue planets are not bound to any star, having been dumped from their original home systems, they're literally careening through interstellar space.

Rogue planets begin their wayward journeys after getting tossed out from their birthplace by powerful gravitational perturbations. A new estimate suggests the Milky Way contains more Rogue planets than stars.

In new <u>research</u> published last week in The Astrophysical Journal, a Polish-led team of astronomers report on the smallest rogue planet yet discovered.

Rogue planets may be abundant, but they're notoriously difficult to detect. Normally, exoplanets are spotted when they pass in front of a host star from our perspective, causing a temporary drop in luminosity (the transit method of detection). This doesn't apply to rogue planets, requiring scientists to rely on a method predicted by Albert Einstein's general theory of relativity.

Instead of a dimming star, the conjunction bends light, forming a temporary ring around the foreground object.

If a massive object (a star or a planet) passes between an Earth-based observer and a distant source star, its gravity may deflect and focus light from the source. Chances of observing microlensing are extremely slim because three objects—source, lens, and observer—must be nearly perfectly aligned.

In addition to the gravitational light ring another important factor is the duration of the lensing event. which can be used to estimate the mass of the lensing object.

Because this event lasted a mere 42 minutes, it's likely a relatively low-mass object, likely around three times the size of Mars. At 42 minutes, it's the most extreme short-timescale microlens discovered to date at the edge of current limits of detecting

Sadly, this is all we know about this little lost planet. Other information, such as its chemical composition or temperature, cannot be known at this time owing to astronomical limitations. Hopefully we'll be able to learn those details in the future, as we continue to investigate these fascinating objects.

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