



NEWSLETTER SEPTEMBER 2021

NEXT MEETING

Internet meeting. *

Date and time: Wednesday 22 September 2021 at 19h00.

Programme:

Video titled: "Why is the Universe the same everywhere?"

Chairman: Louis Kloke.

*** You will receive an e-mail invite from Johan Smit around 18:30 to join the meeting. Please join as quickly as possible.**

Virtual observing evening chat 17 September 2021

Like last month, this will start at 18h30. Johan Smit will open the meeting at around 18h15 and anyone who wishes to join the chat is welcome to join in the fun. Be seated in front of your computer at 18h15 with a glass of wine/beer/coffee.

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Astronomy-related articles on the Internet

[EarthSky | Why 61 Cygni is nicknamed Flying Star](#)

61 Cygni is a binary star system in the constellation Cygnus, consisting of a pair of K-type (orange) dwarf stars that orbit each other in a period of about 659 years. It is only 11.4 light-years away and is visible with the naked eye. Stargazers like it because it has one of the highest proper motions of any naked eye star.

[NASA's ENIGMA -'We Have Found the Building Blocks of Life' \(Weekend Feature\) | The Daily Galaxy](#)

Ctrl-Left click on one of the following two links. You reach a website where, if you left click on one of the links there, you go to another website where you can read the article and a pop-up window shows you the titles of other articles. Left click on "READ MORE" to read such an article.

[Last Week's Top 5 Space & Science Headlines --"Vestiges of a Prior Universe to Darwin's Extraterrestrials" - by The Galaxy Report - The Galaxy Report \(substack.com\)](#)

[The Galaxy Report -- "Primordial Black Holes May Flood the Universe to Planets of Milky Way's Ancient Bulge" | The Daily Galaxy](#)

When you Ctrl-Left click on one of the following five links, you reach a website where you can read the article. The titles of other articles are shown in the pop-up window that appears. Left click on "READ MORE" to read such an article.

[Extraterrestrial Life --"Is Earth the 'Standard Model' for the Universe?" | The Daily Galaxy](#)

["Unfathomable Abodes of Life?" --Water Worlds of the Milky Way | The Daily Galaxy](#)

["The Mystery Continues" --New Hubble Observations of Neptune's Great Dark Spot | The Daily Galaxy](#) The dark spots on Neptune are huge storm systems. They have come and gone over the years.

[Alien Habitats --"They Could Be Just About Anywhere" | The Daily Galaxy](#)

[TESS Detects Mystery Objects --"Neither a Brown Dwarf or a Star" | The Daily Galaxy](#)

NOTICE BOARD

Another Zooniverse project. Use your PC to examine images to find comet-like tails... on asteroids! These strange objects hold clues about water on Earth, in the solar system, and beyond.

<https://www.zooniverse.org/projects/orionnau/active-asteroids>

New launch date for the JWST. The new launch date is December 18, 2021.

Sky Guide Africa South 2021: Contact Michael Poll to collect yours if you are entitled to one and haven't collected it yet.

Old newsletters: All old newsletters from January 2004 onward are on our website. They contain a record of our Centre's activities as well as astronomical information.

Data base: Members are reminded that a data base of the books in our library is to be found on our website.

Feature of the month: a star swallowed a compact object and exploded

For the first time, astronomers have captured solid evidence of a rare double cosmic cannibalism — a star swallowing a compact object such as a black hole or neutron star. The compact object spiralled inside the still-living star for centuries and in turn, that object gobbled the star's core, causing it to explode and leave behind only a black hole. While theorists have previously envisioned such a scenario, dubbed "*a merger-triggered core collapse supernova*", this appears to represent the first direct observation of this phenomenon. It took sleuthing through data collected by a variety of observatories to piece together the evidence of this theorized cosmic phenomenon. Ω

[Astronomers may have seen a star gulp down a black hole and explode | Science News](#)

Astronomy basics: The Milky Way

[Fast Facts About the Milky Way Galaxy | The Daily Galaxy](#)

Astronomy-related images, video clips and documentaries on the Internet

[\(751\) The UFO Phenomenon | Full Documentary | 7NEWS Spotlight – YouTube](#)

This video clip of NGC 6717 was compiled from images made by the HST. NGC 6717 is a globular cluster located about 20 000 light-years from Earth in constellation Sagittarius. Left click on "More Videos" in the clip to see more video clips.

[Vibrant globular cluster sparkles in new Hubble telescope photo | Space](#)

[The Best Hubble Space Telescope Images of All Time! | Space](#)

Observing: A dark ring galaxy - by Magda Streicher

Eridanus is probably named after the river Nile and the only starry river constellation flowing from north to south. NGC 1199 is a rather faint elliptical galaxy a few arc-minutes east of NGC 1198, which is also an elliptical system, but smaller. Towards the south of these two galaxies are the much smaller companions NGC 1190, 1191 and 1192. This special group is also part of the edge-on galaxy NGC 1209, which is situated 34' towards the east with another two companions NGC 1231 further east and NGC 1188 towards the north of the group.

The galaxy NGC 1199 is irregular in shape with a low surface brightness and a barely visible non-stellar nucleus. With higher magnification the galaxy displays a very hazy edge fading away into the darkness. According to available data, a faint distinctly dark ring surrounds NGC 1199, showing up in photographs taken with the Palomar 5 meter telescope, and the 4 meter telescopes at Kitt Peak and Tololo. The only way such a ring could appear dark would be if there were material in it that absorbs the light of the galaxy behind it. A lot about the Universe is unknown. The process of discovery is slow. Ω

NAME	TYPE	RA	DEC	MAG	SIZE
NGC 1199	Galaxy	03 h 03.6 m	-15° 36.8'	11.3	2.3' x 2'

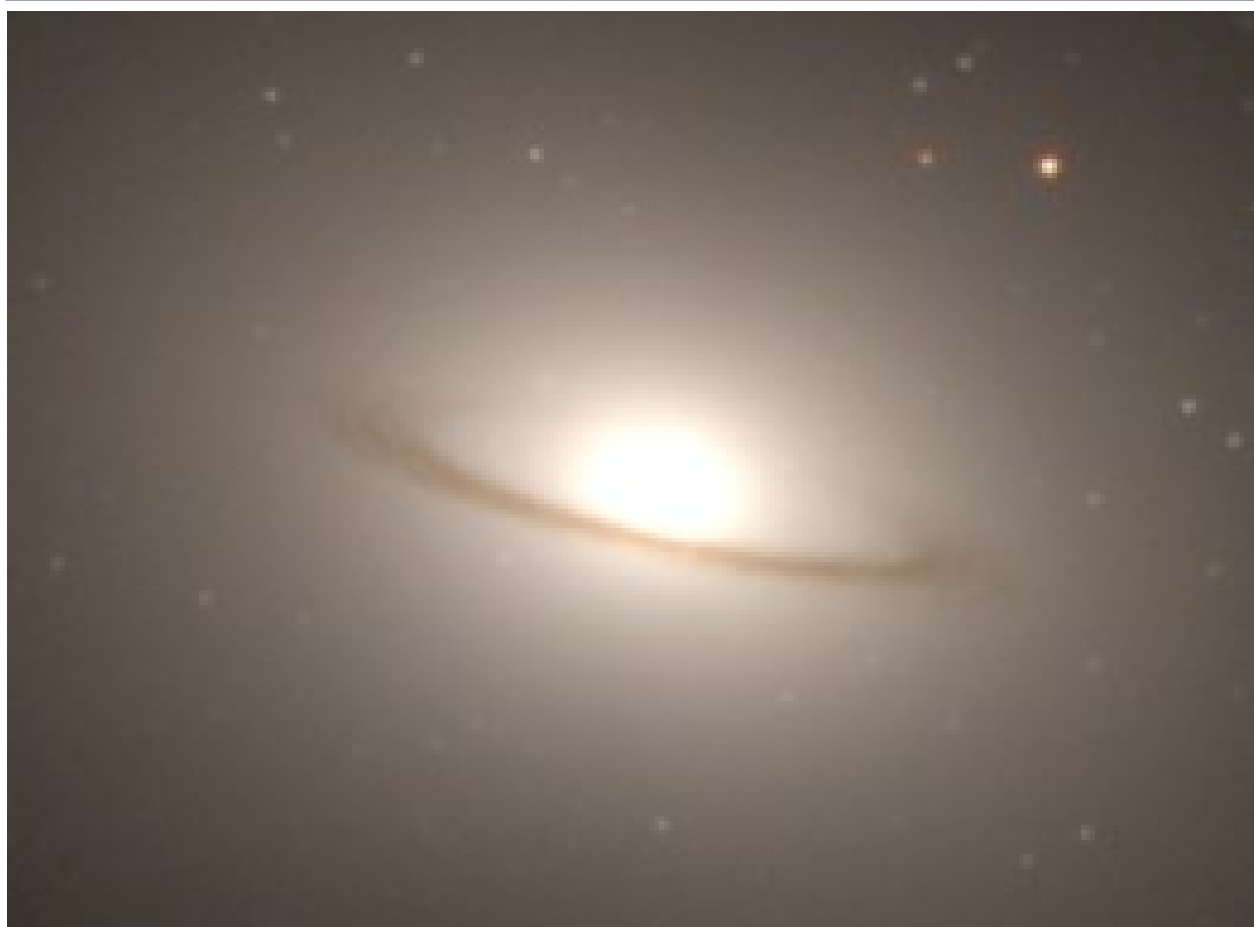
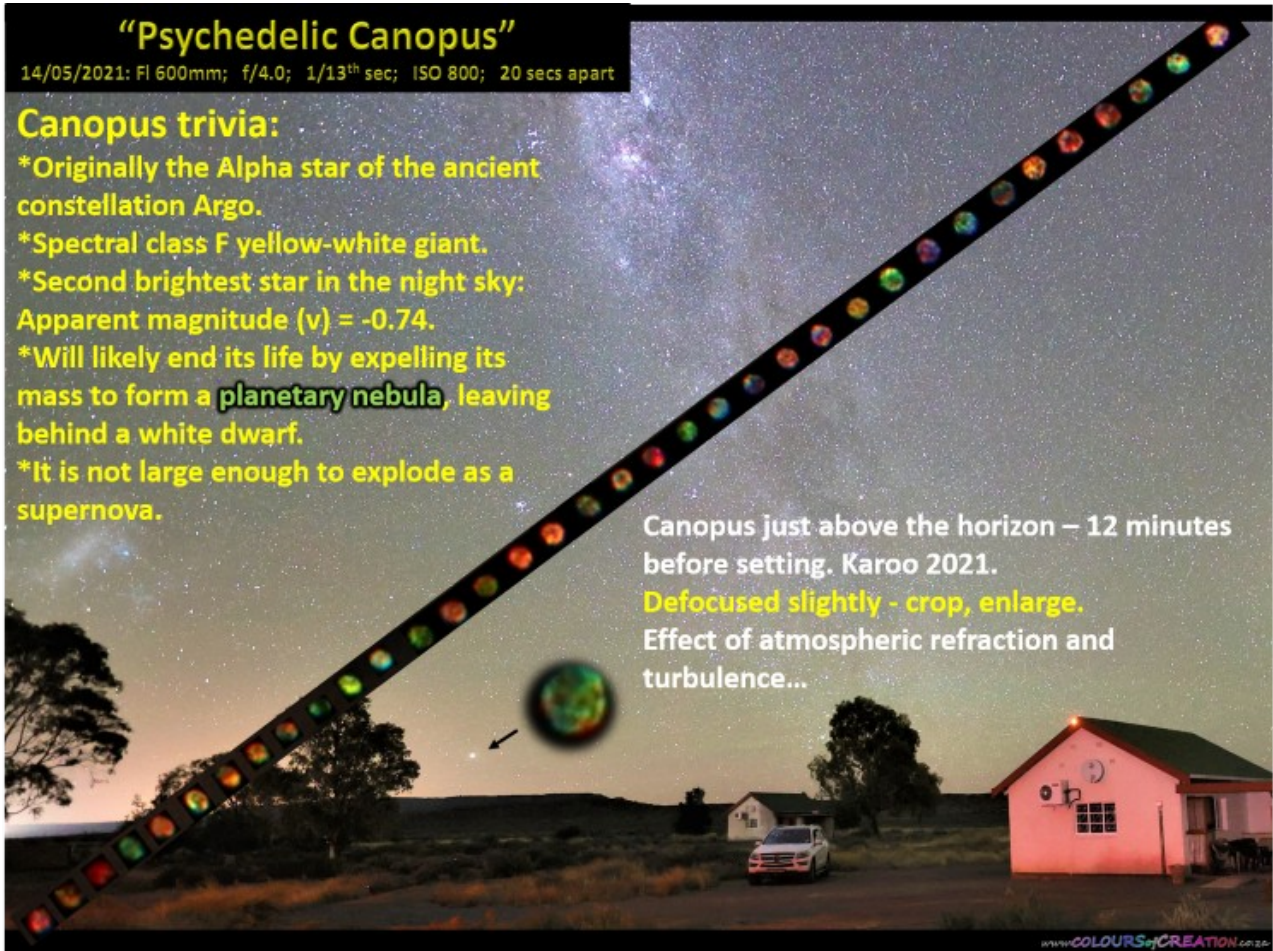


Image of NGC 1199, made by the HST

Astrophoto with annotations - by Johan Moolman



The band across the photo above is a series of photos of the star Canopus during the last 12 minutes before it disappeared behind the horizon. The photos were slightly defocused. The different colours are due to atmospheric refraction and turbulence. Each of the photos was then cropped and enlarged. Then they were stacked from top right to bottom left, in chronological order.

Message from Neville Young about his astronomy-related “techno-tinkering”

In an effort to revitalize my Starwaders Youtube channel (which has very slowly been gathering subscribers in the past 12 years), I video-ed the repair of two Canon cameras - which I managed to do successfully. They are standard Canon 6D cameras that have been modified to function as a cooled-sensor astrophotography camera. You might find the videos interesting, but it would help if you are a geek like me! The videos do involve serious tinkering so if you fast-forward through them I won't be offended. However briefly you might view them, do me a favour and give them a LIKE and perhaps even subscribe to my channel. These will really help to attract attention to the channel. I will be creating many more techno-tinkering and astronomy videos in an effort to popularize it.

First one: <https://youtu.be/Nko9gcNc09o>

Next one: <https://youtu.be/0CcBC9EkUNM>

Besides the videos, it would be nice to hear how you are getting on.

Cheers – Neville

Astronomy is Within Your Reach

Neville Young - Starwaders cc

Educational Astronomy Products

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Website link: www.starwaders.com

Twitter: <http://twitter.com/starwaders>

Author of [Astronomy Within Reach](#) and [Sterrekunde Binne Bereik](#)

Science is the Engine of Prosperity Ω

Web links for the astronomy enthusiast

- ◆ **The website for all information about the ASSA and the ASSA Centres:**
<https://assa.sao.ac.za/>
- ◆ **ASSA Specialist Sections:**
 ASSA has various areas of interest. Join and participate!
<https://assa.sao.ac.za/sections/>
- ◆ **ASSA Publications to download and enjoy:**
 MNASSA: <https://www.mnassa.org.za/>
 Nightfall: <http://assa.sao.ac.za/sections/deep-sky/nightfall/>
 To receive as part of ASSA membership benefits - *Sky Guide*, the astronomical handbook for Southern Africa: <http://assa.sao.ac.za/about/publications/sky-guide/>
- ◆ **Mail Groups to join:**
 For general ASSA related information: <https://groups.io/g/ASSA-announce>
 For posting general items and discussion: <https://groups.io/g/ASSA-discussion>
- ◆ **Social Media to join and share:**
 Facebook: https://www.facebook.com/Astrosocsa/?_rdc=1&_rdr
 Youtube: https://www.youtube.com/channel/UCJ4b1fhmPvYTOsy15YP-_JA
 Twitter: <https://twitter.com/AstroSocSA>
- ◆ **More web links can be found on page 118 of “2021 Sky Guide Africa South”. Ω**

Pretoria Centre committee

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