

News story: UK scientists part of astronomical landmark result

Scientists from the University of Leicester and the Mullard Space Science Laboratory at University College London, have been working on the research, thanks to funding from the UK Space Agency.

The outburst took place in a nearby galaxy called NGC 4993, located about 130 million light-years away in the direction of constellation Hydra.

Today, dozens of UK scientists and their international collaborators representing 70 observatories worldwide announced the detection of this event and the significant “scientific firsts” it has revealed about our Universe.

The ripples in space finally reached Earth at 1.41pm UK time, on Thursday 17 August 2017, and were recorded by the twin detectors of the US-based Laser Interferometer Gravitational-wave Observatory (LIGO) and its European counterpart Virgo.

Just 1.7 seconds after the gravitational waves rushed past Earth, NASA’s Fermi Gamma-ray Space Telescope caught high-energy light from an explosion associated with the event. Swift, Hubble and Chandra missions, along with ground-based observatories including the Blanco telescope in Chile used by DES, later captured the fading glow of the blast’s expanding debris.

Once pin-pointed, the Swift satellite quickly maneuvered to look at the object with its X-ray and Ultraviolet and Optical telescopes. Swift is a NASA/UK/Italian mission launched in 2004 to study gamma-ray bursts (GRB). The UK involvement in the mission is as Co-Investigators for the X-ray Telescope through the University of Leicester and the Ultraviolet and Optical Telescope through MSSL.

Prof Julian Osborne said:

The discovery of early blue emission by Swift from this neutron star collision discovered by its gravitational radiation is a landmark result, a first scientific result from the widely anticipated joint signal conveyed by both light and by gravitational waves.

The results combine to tell us about the neutron stars, their destruction and its aftermath in which some of the heaviest elements (like gold and platinum) are created. This work was made possible by the UK contributions to the NASA Swift satellite project, including the building its X-ray camera and its ultra-violet/optical telescope, as well as the development of new observing strategies to enable the rapid search of the large sky

regions to which the gravitational wave signal has been constrained.

Dr Paul Kuin, from UCL Mullard Space Science Laboratory, who works on Swift, said:

As the collision occurred relatively close to Earth, scientists were able to point telescopes in the direction of the event and get a clear picture of the light. We successfully tracked the UV light using the Ultraviolet and Optical Telescope on-board NASA's Swift satellite which is a UCL built, operated and maintained instrument that has been active since its launch in 2004.

Neutron stars are the dead remnants of massive stars, they contain the mass of our Sun in an object the size of a city. When they collide, some of the neutrons are ripped off and start to interact with each other, forming some of the heaviest elements in the universe. Radioactive decay of these elements then produces light in what is often called a 'kilonova'.

The Swift data gave unprecedented insight into how new elements are formed after a neutron star merger.

[News story: Keep your charity safe – watch out for phishing scams](#)

Phishing is when fraudsters attempt to hoax users and get hold of sensitive information such as:

- usernames
- passwords
- credit card details

They do this through electronic communication like email, pop-up message, phone call or text message.

[Action Fraud](#) get around 8,000 reports of phishing each month, which shows the scale of these scams.

Charities, like any other organisation, can be at risk and we are urging trustees to be vigilant.

It's important to consider how to protect your charity from harm online. You can read detailed advice from government on [improving cyber security](#). You can also find out how to become accredited under the [Cyber Essentials Scheme](#).

If you think your charity has been affected by a phishing scam, whether it was prevented or not, report it to [Action Fraud](#) through their website or call them on 0300 123 2040.

If your charity has fallen victim to a phishing scam and lost sensitive data or valuable funds, you need to [report it to us as a serious incident](#).

- make sure charity software has up-to-date virus protection (though it will not always prevent you from becoming infected)
- don't click on links or open any attachments you receive in unsolicited emails or SMS messages. Fraudsters can 'spoof' an email address to make it look like it's from a trusted source. If you're unsure, check the email header to identify the true source of communication. Information on how to find email headers is available on the [MX Toolbox website](#)
- always install software updates as soon as they become available, they will often include fixes for critical security vulnerabilities
- if your current software does not offer an 'anti-spyware' function, consider installing software which does, it can detect key loggers
- make regular backups of your important files to an external hard drive, memory stick or online storage provider. But, it's important that the device you back up to is not left connected to your computer, as a malware infection could spread to that too
- if you suspect your bank details have been accessed, you should contact your bank immediately

The Charity Commission (independent regulator of charities in England and Wales) has issued this alert to charities as regulatory advice under section 15(2) of the Charities Act 2011.

[Press release: PM call with Taoiseach Varadkar: 16 Oct 2017](#)

The Prime Minister spoke to Taoiseach Leo Varadkar this afternoon.

On Storm Ophelia, the Prime Minister expressed her sympathies for the loss of life and said the UK Government stood ready to provide any support if requested.

They discussed the political situation in Northern Ireland and their shared concern over the lack of devolved Government in Northern Ireland for over 9 months.

Both leaders noted that while progress has been made over the past few weeks significant gaps still remained, including on Irish language, and it was up to the two main parties to overcome differences and reach agreement.

The Prime Minister said she was absolutely clear that it was in the interests of everyone in Northern Ireland to see a fully functioning Executive up and running so that local decisions could be made by local politicians.

On the UK's departure from the EU, they discussed the importance of maintaining constructive progress in the negotiations. Both agreed to continue discussions at EU Council later this week and the Prime Minister reiterated the UK Government's commitment to protecting the Belfast Agreement and the Common Travel Area.

[Press release: South London man convicted for large number of unlicensed medicines](#)

Kim-Andre Frantzen, of Kenley, South London, was sentenced today at Guildford Crown Court for the supply and possession of substantial quantities of unlicensed medicines.

MHRA investigators raided properties in South London and seized more than 209,250 doses of unlicensed products, including erectile dysfunction medicines worth more than £471,000.

Frantzen pleaded guilty to the charges and was sentenced to 9 months imprisonment, suspended for 18 months, and 200 hours of unpaid work. He was also ordered to pay a £100 victim surcharge plus costs of £2,500.

MHRA is currently running the #FakeMeds campaign to warn people against buying potentially dangerous or useless unlicensed medicines sold by illegal online suppliers.

MHRA Head of Enforcement, Alastair Jeffrey, said:

Selling unlicensed medicines is illegal and can pose a serious risk to health.

Unlicensed medicines can be dangerous as you just don't know what's in them, or if they even work. They may contain dangerous ingredients that could have awful consequences for your health.

Criminals don't care about improving your health – they are only interested in your wallet. So why take that risk?

We will continue to track down and prosecute those who are willing to put others' health in jeopardy.

Visit www.gov.uk/fakemedts for [tips on buying medicines safely online](#) and how to avoid unscrupulous sites.

[Press release: Government actions a further step in homeless prevention](#)

New guidance to make sure local authorities intervene earlier to help prevent families and individuals becoming homeless in the first place has been published today (16 October 2017).

The guidance, which is subject to an [8-week consultation](#), sets out how local councils should implement the [Homelessness Reduction Act](#), due to come into effect in April 2018. The new Act requires councils to provide services to all at risk of becoming homeless, on top of those with a priority need such as families with children and those who are vulnerable.

Following further discussions with local authorities in England on the resources required to implement the Act, the government is providing an additional £11.7 million in new burdens funding to local authorities, taking the total amount to £72.7 million. This additional funding will be shared among local authorities over 2 years to meet the requirements of the Act.

The government will also be providing a share of £3 million to local authorities to support them in upgrading their data systems to allow them to assess how the Act is changing homeless prevention in their areas. This comes on top of the government's investment of £550 million until 2020 for homelessness and rough sleeping.

Minister for Homelessness Marcus Jones said:

Tackling homelessness and rough sleeping are complex issues with no single solution, but this government is determined to help the most vulnerable in society. That's why we're implementing the most ambitious legislative reform in decades, the Homelessness Reduction Act.

Local authorities play a vital role in implementing the Act. Therefore the guidance and government funding will support them in making sure people will get the help they need earlier to prevent them becoming homeless in the first place.

The consultation asks for views on the guidance for local councils as they prepare to undertake their new duties under the Act, including:

- Making information and advice about homelessness available to all

residents free of charge. This includes advice on preventing homelessness and securing accommodation, as well as rights under the Act, and how to access help.

- Tailoring advice to meet the particular needs of vulnerable groups, including victims of domestic abuse and young adults leaving care.
- Working collaboratively with people who are homeless or threatened with homelessness, to agree a personalised housing plan based on their needs and circumstances. The plan will set out the 'reasonable steps' the local authority and the customer will take to prevent homelessness or help to secure alternative housing.
- Providing help to prevent and relieve homelessness for all eligible applicants, including single people who do not have 'priority need', and those who might be considered 'intentionally homeless'.
- Securing and helping to secure suitable safe accommodation for people who are homeless, or helping them to stay in their current home wherever possible and appropriate.

The [8-week consultation](#) closes on 11 December 2017.

The Homelessness Code of Guidance has been drafted with the assistance of a working group of local authorities and other stakeholders, and the final version will be published in the spring 2018.

The government is also continuing to fund free training through the [National Housing Advisory Service](#), a partnership between Shelter and Citizens Advice, for local authority staff on the Homelessness Reduction Act up until April 2018.