

July 2018

Issue 20



**SCIENCE
VIEWS**

The latest news and science opportunities

by Science View

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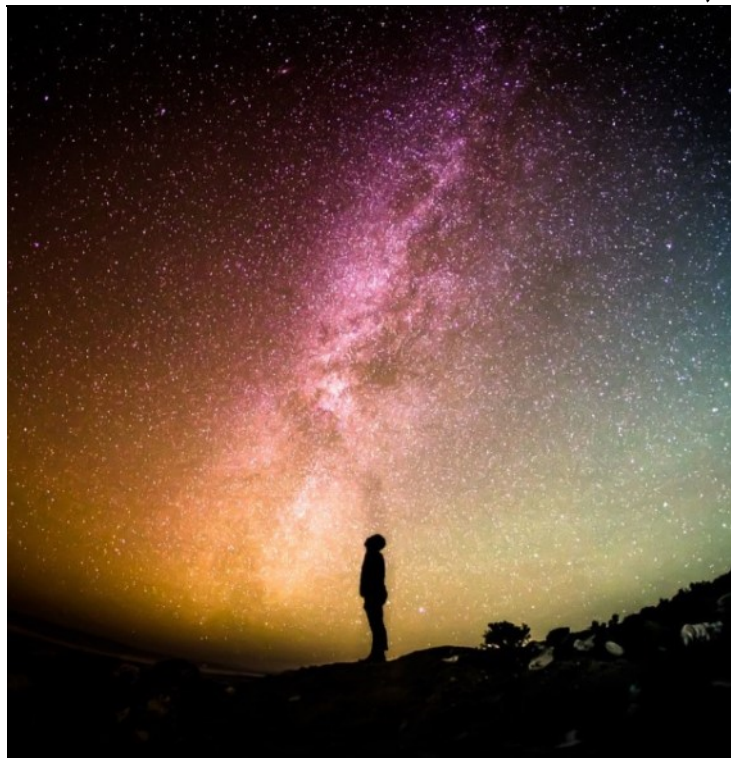
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The latest news and science opportunities

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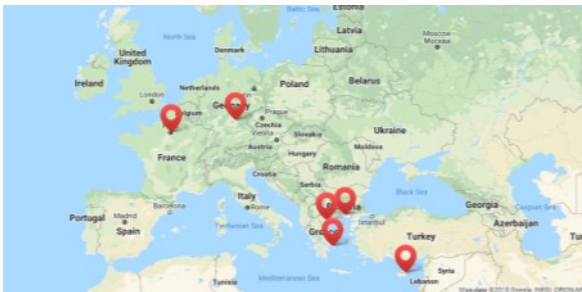
- ⇒ CASE, CREATIONS, OSOS, STEAM Summer Schools
- ⇒ European Student Parliament on Science
- ⇒ Hellenic OCR Team
- ⇒ World Space Week 2018

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Hellenic OCR Team: A unique crowdsourcing platform

Written by Dr. Fotis Fitsilis Founder and Team Leader of Hellenic OCR Team

In late 2017, a unique crowdsourcing platform was born. Founded by Dr **Fotis Fitsilis** and Prof. **Giorgos Mikros**, Scientific Service of the Hellenic Parliament and University of Athens respectively, the **Hellenic Optical Character Recognition (OCR) Team** represents the first scientific crowdsourcing initiative that aims exclusively at the processing and study of parliamentary textual data. It builds on the plain idea that a decentralized group of people can be more than the mere sum of individuals.



Currently counting 14 members in 4 countries, our team members are virtually linked through an online exchange platform and gather regularly for monthly meetings, where problems are discussed and best practices are exchanged. Newcomers receive basic training on entering the group, while more experienced members, called 'mentors', provide peer-to-peer advice and support. Text processing follows a well-defined streamlined process, which is developed in order to build quality corpora of parliamentary relevance. The resulting content is brought in an open and structured format, such as

XML (eXtensible Markup Language), and enables the use of novel tools and methods from the exciting field of computational linguistics.

The opportunities that arise from the study of the aforementioned corpora are tremendous, as they allow for interlinking of several - formerly distant - areas of research, such as history, political science and linguistics, thus opening up new horizons in the understanding of parliamentary data and discourse.

The Hellenic OCR Team is rapidly expanding and is looking for interested individuals to further enhance its dynamic interdisciplinary team. In exchange for a bit of their spare time, members join an international scientific network and earn early access to scientific projects, while having the opportunity to acquire valuable new skills and hands-on work experience on state-of-the-art tools and methods in the dynamic area of computational social sciences.

This small but growing interdisciplinary community of students, scholars and practitioners, is looking forward to organizing a maiden **hackathon** in 2018 as a next step, to make this young and dynamic team acquainted with new methods, to strengthen bonds between members and foster their commitment to its goals.

For membership and additional enquiries visit the Hellenic OCR Team website, www.hellenicOCRteam.gr or send an email to info@hellenicOCRteam.gr.



European Student Parliament on Science completed successfully

Edited by *Giannis Kostikas (Science View)*



Debate science

[Parliament on Science.](#)

The theme that was discussed in this year's event was "The Future of Mobility", divided in 5 thematic:

- Autonomous Vehicles
- Carbon-neutral Transport
- Mobility in the City
- Neo-nomads and Digital Natives
- Aviation and Space Flight

During the first two days, the students were divided in 5 committees, one for each thematic, and had the opportunity to exchange their ideas on the subject and develop and co-modify their proposals. Among other things, they contacted with European scientists and received advice and information on current developments on each subject. At the end of the second day, the students of each committee have co-formed a resolution on how European politicians should respond to mobility issues. The five resolutions have been put to vote on the third day, in the plenary session of the European Student Parliament on Science, which took place in the hall of the County Council of Haute Garonne, giving a sense of genuine parliamentary process.

At the end of the process, the students handed the resolution to the European Commissioner for Research, Science and Innovation, Carlos Moedas, who inter alia pointed out that "young people really want to do something that will change the world" and that he is very proud being there representing the European Union and the European Commission.

Young people, aged 16 to 19, from 10 European countries met each other in Toulouse from 6 to 10 July, for their participation in the [European Student](#)

Last but not least, the students had the opportunity of a flash presentation of the Student Parliament's resolution at the EuroScience Open Forum ([ESOF 2018](#)), providing the perfect framework for the exchange of views among them and high-ranking scientists.

Participating countries for this year were Bulgaria, Denmark, France, Germany, Greece, Ireland, Israel, Italy, Serbia and Switzerland.

The Greek delegates described their participation in the European Student Parliament on Science as an "unforgettable life experience that they would doubtless want to live again" Regarding to the parliamentary procedures, they stressed that: "We had the opportunity to learn about the European Parliament's decision-making processes and to propose and vote on our own ideas. At the same time, we attended speeches by expert scientists on the subject; we co-operated with young people from all over Europe and got a taste of hospitality at a French university".

In Greece, the project was realized for third time by Science View with the support of the Geodynamic Institute of the National Observatory of Athens and Ellinogermaniki Agogi on March 30 – April 1, 2018. It was organized as an educational activity within the framework of the European project [Open Schools for Open Societies](#).



Photo credits: WID / Marie von Essen & Lena Herzog

CASE Summer School 8-13 July 2018

Written by Georgios Triantafyllou (Science View)

In the framework of the CASE (Creativity, Art and Science in Primary Education) project funded by the Erasmus+ programme of the EU, a Summer School took place on 8-13 July in Marathon, Athens, Greece. The [CASE Summer School 2018](#) was a 5-day intensive course that introduced 3 case studies ("Learning Science Through Theater", "Learning Science through Puppetry" and "Learning Science through Digital Narratives") for creative science inquiry in the classrooms of primary schools. It elaborated a methodology that regards teachers as agents of change and aims to empower their profession with skills and competencies that will enable them to widen their teaching capabilities by incorporating creativity and art in science education. **22 primary school teachers and education professionals from across Europe gathered on 8-13 July in Marathon, Greece in order to enhance their teaching capabilities.** Participants were introduced to each case's implementation methodology and they were divided into three groups according to their interests. Through a collaborative approach all groups cooperated in order to develop and present a final performance on a scientific theme,

integrating aspects of all cases: theatre, puppetry, slowmotion, digital narratives and enriching it with creative approaches on music and choreography. During the 5-day intensive course, social activities were also organized such as a visit to Cape Sounio and the Acropolis at the historical city centre of Athens. After the success of the 2018 edition, another Summer School is to be organized in July 2019.



Photo credits: Science View



STEAM Summer School 2-11 July 2018

Written by Giannis Kostikas (Science View)

Interactive experiments and informal learning with the use of creativity and arts took place on 2-11 July 2018 in Malta. STEAM is a 10-day intensive summer school in science communication that marries science and art through practice. Summer school's goals were to improve science awareness and develop informed opinions, increase student uptake of STEM careers for high-level jobs, stimulate the socio-economic wellbeing of partner countries, and enhance the transferable skills of current researchers.

Alexandros Koukovinis from Science View presented "Create & Act", a course about using art to communicate science more effectively in an interdisciplinary and multidisciplinary approach. The lesson's main aim was to give the participants the opportunity to stage a play and dramatise scientific concepts based on material from any field of science.

When it comes to educational purposes, traditionally the body is rarely used to its full potential. Every

involvement of the body has mostly been excluded from the educational practice, the process of learning, and interaction among students. The notion of embodied learning is becoming more and more accepted by the educational community. The body does not solely constitute a means of knowledge, or function as a mediator, but also reflects people's interaction with their environment.

More info [here](#).



Photo credits: STEAM



OSOS Summer School 2018

Written by *Giannis Kostikas (Science View)*

Teachers from all over the world had the opportunity to live a high-impact and transformative experience in personal and organizational level in the OSOS Summer School, held in Marathonas (Attica, Greece) from 1st to 6th of July 2018. Participants were provided significant insights and tools to implement the necessary changes and with the intervention skills to best plan and then diffuse innovation in their own school, helping it evolve to an Open Schooling Environment, establishing Responsible Research and Innovation (RRI) principles.

The OSOS Summer School provided them with a powerful framework to engage, discuss and explore:

- ⇒ how their school needs to evolve, transform or reinvent itself, according to the innovation level it is already reached

- ⇒ how a school will facilitate open, more effective and efficient co-design, co-creation, and use of educational content (both from formal and informal providers), tools and services for personalized learning and teaching

- ⇒ how their school can become an innovation incubator and accelerator

Through the OSOS Summer School Course, participants were given the knowledge and skills to assess existing learning methods and material in their school, abandon those which fail or are too costly, learn lessons, and disseminate and reproduce the successful ones on a larger scale.

More info [here](#).



Creations Summer School 2018

Attica, Greece | 08/07 - 13/07/ 2018

The [CREATIONS Summer School](#) introduced to teachers and artists, wishing to extend the "dialogue" between scientists and the educational community, innovative approaches and activities that involve teachers and students in Scientific Research through creative ways that are based on Art. The course took place in Marathonas (Attica, Greece) 8-13/7/2018 and focused on the development of effective links and synergies between schools and research infrastructures in order to spark young people's interest in science and in following scientific careers.

Based on the CREATIONS pedagogical framework these educational activities were enriched and expanded with creative approaches to develop artworks (exhibits, Theatre, Opera).



Photo credits: CREATIONS

Learning Science Through Theater 2018-2019

Following the successful recipe of the previous years, LSTT is establishing its annual nature by launching the 5th in a row national implementation period for the school year 2018 - 2019.

Schools from all over the world are eligible to implement the activity as long as they communicate and cooperate with the organizers.

The activity is open to all school grades (primary and secondary schools).

Stay tuned as on September 17, with the start of the new school year, registrations will open! For more info visit www.lstt.eu





Call for participants to join the 14th Scientix Projects' Networking Event on "Research into the classroom"

 **Athens, Greece**
 **5/9/2018**

Many European countries are lagging behind in international educational studies such as PISA and TIMMS, particularly in areas such as science, mathematics and reading. There is a strong need for innovative approaches to increasing the motivation of pupils towards STEM subjects and for offering teacher training into innovative ways of introducing science into the classroom. Additionally, there is still much work to be done in improving the image of scientists at the societal level. Initiatives that help demystify science and the scientific paradigms, and which connect pupils with real scientists can create a long lasting positive impact with regards to the poor image of scientists. Moreover, connecting schools with the world of research is an essential step in ensuring that the research sector will benefit from much-needed talent in its various fields and that students are thought to navigate the claims and counterclaims bombarding us in our everyday lives.

20 to 30 participants are expected to join the 14th Scientix Projects Networking Event, including experts, and project and organisation representatives working on the topic, as well as researchers, teachers, policy makers, SMEs and other interested education practitioners (but it is not a teacher training event).

The 14th Scientix Projects Networking Event is held on 5 September 2018 from 9:30 to 15:30 CEST at TECHNOPSIS in Athens, Greece. This edition of the networking event focuses on research into the classroom. The event is co-organised by [Scientix](#), [GFOSS –Open Technologies Alliance](#), [Jet Propulsion Theatre](#), [EDU-ARCTIC](#) and [ERIS](#).

Anyone who would like to contribute to the networking event can express their interest by filling in an online form available on the Scientix website, by 21 August 2018.

<http://www.scientix.eu/networking-event/14th-spne-before>

**Η ΕΚΠΑΙΔΕΥΣΗ
ΣΤΗΝ ΕΠΟΧΗ ΤΩΝ Τ.Π.Ε.
ΚΑΙ ΤΗΣ ΚΑΙΝΟΤΟΜΙΑΣ**
Αθήνα, 10 και 11 Νοεμβρίου 2018

"Education in the ICT and Innovation Age" Conference

 **Athens, Greece**
 **10-11/11/2018**


Teachers are invited to submit work on the 14th Pan-Hellenic Conference entitled "Education in the ICT and Innovation Age" that will be held on 10 & 11 November 2018, in Kallithea (Athens), Harokopio University.

The conference aims among others to present modern approaches in educational process, to sensitize teachers on teaching methodology in the exploitation of ICTs, to foster Innovation in Education and to a fruitful discussion and a constructive dialogue on cases of exploitation of ICT as well as Innovation in Education,

Paper submissions until 1 September 2018. More info at: <http://synedrio.edu.gr/>



Science for Society: Opportunities for Horizon Europe

 **Brussels , Belgium**
 **6/9/2018**

The Guild and the Russell Group have the pleasure of inviting you to the event: 'Science for Society: Opportunities for Horizon Europe'!

A panel of academic leaders will explore the ways in which the social sciences and humanities can set the context for Horizon Europe to achieve wider impact, reach out to citizens, help us understand the impact technologies have on our societies, and foster new levels of interdisciplinarity.

The Guild comprises nineteen of Europe's most distinguished research-intensive universities in fourteen countries, and is dedicated to enhancing the voice of academic institutions, their researchers and their students.

Registrations to join the discussion are open till 31 August. More info [here](#).



EIT Digital Annual Conference: Driving global impact with European digital innovations

 Brussels, Belgium

 11/9/2018

On 11 September 2018, the leading European open innovation organisation EIT Digital will host its third annual Conference showcasing EIT Digital's vision and achievements about shaping digitalization in Europe.

- ⇒ LISTEN: Leading government and industry experts as well as entrepreneurs will bring their experience with disruptive digital innovation.
- ⇒ EXPERIENCE: Showcasing of disruptive digital innovations that EIT Digital brings to live in the EIT Digital market place.
- ⇒ NETWORK: The EIT Digital Conference will provide an opportunity to network with attendees from a diverse range of organisations and research institutes, as well as policy and decision makers from the European Parliament, the European Commission and public authorities.

Stay tuned for more information: <https://www.eitdigital.eu/conference>



World Space Week 2018

Year's theme: "Space Unites the World"

 Worldwide

 4-10/10/2018

The largest space event on Earth, UN-declared World Space Week is celebrated October 4-10 annually. It is an international celebration of the contribution of space science and technology to the betterment of the human condition. World Space Week consists of a myriad of space-related events held by space agencies, aerospace companies, schools, planetaria, museums, and astronomy clubs in a common timeframe to achieve greater student and public impact through synchronization.

More than 3,700 events in 80 countries celebrated the benefits of space and excitement about space exploration in 2017. The 2018 theme is "Space Unites The World" and 2019 theme "The Moon: Gateway to the Stars."

The theme is inspired by UNISPACE+50, an historic gathering of world space leaders which will occur in 2018. UNISPACE+50 will promote cooperation between spacefaring and emerging space nations and help space exploration activities become open and inclusive on a global scale, according to the UN.

Find out events next to you and learn how to organize your event at:

<http://www.worldspaceweek.org/>



Science Writers 2018

 Washington, D.C., USA

 12-16/10/2018

A meeting for science writers, by science writers.

Join the meeting in Washington, D.C., for professional development workshops developed by the National Association of Science Writers, briefings on scientific research presented by the [Council for the Advancement of Science Writing](#), and lab tours and science field trips organized by the [George Washington University](#), and its hosting partners. Registration opens on 1 August 2018.

More details at: ScienceWriters2018.org.

Communication and scientific research - training course for Phd students and researchers



The Research Support and Knowledge Transfer Division, in collaboration with Ilaria Ampollini, organizes a training course on the communication of scientific research for doctoral students and researchers.

The course, part of the CLaSTer project, aims at fostering the reflection and the debate between the researchers on topics related to the Third Mission and the communication of research. The four meetings will firstly provide researchers with the practical tools to optimize strategies of science communication; moreover, participants will get the chance to prove themselves with a series of short workshops. A solid theoretical overview will be also provided, in order to outline the key themes of the existing literature about science communication.

Further details about the course are available [here](#).

Student internships offered by ESA



ESA offers students a wide range of student internship options. Technical opportunities are available at most ESA Establishments. There are also a limited number of non-technical opportunities.

Preferably in their last or second to last year of a master's degree, many students take the opportunity to prepare their thesis during their time at ESA.

- ⇒ **ESOC and ESEC (Redu):** Applications for internships in 2019 will be accepted from 1 September to 31 October 2018.
- ⇒ **EAC:** EAC Internship opportunities are offered in a number of areas. For information on EAC internships, application procedures, internship periods and contact email addresses, please see [Internship Opportunities at EAC](#).
- ⇒ **ESTEC and ECSAT:** Applications for internships in 2019 will be accepted from 1 September to 31 October 2018.
- ⇒ **ESRIN:** Applications for internships in 2019 will be accepted from 1 September to 31 October 2018.

More info at: https://www.esa.int/About_Us/Careers_at_ESA/Student_Internships2

Permanent position of researcher B at the Geodynamic Institute, NOA (Athens, Greece)



A Call for filling one (1) position of Researcher B at the Geodynamic Institute of National Observatory of Athens, Greece was submitted to NOA's website, with a subject "Modeling and analysis of marine wave systems from geodynamic phenomena, with emphasis on wave modeling and coastal impacts, operational wave prediction analysis, marine data bases from tide gauges, or coastal monitoring data.

See the full text [here](#).

Lecturer in Science Communication in Australian National University (ANU)



CPAS is a leader in science engagement practice and research. This level B academic will share expertise in science engagement practice, research, and teaching with colleagues and students in CPAS and show potential for national and international leadership. The lecturer will pursue research in their specialist area of public engagement as well as be aware of the broader field of science engagement.

Closing date: 19 August 2018, More info [here](#).

EU^{edu}News

Edited by Georgios Triantafyllou (ScienceView)

European Commission's proposal for the future of the Erasmus+ programme

For the next long-term EU budget 2021-2027, the European Commission is proposing to double funding for Erasmus to €30 billion from €14.7 billion which was the budget for the period 2014-2020. This budget will be split with €25,9 billion for education and training, €3,1 billion for youth and €550 million for sport. The aim of the Commission's proposal is to:

- **Increase the number of beneficiaries:** Doubling the programme's budget will make it possible to support up to 12 million people between 2021-2027 - three times as many as in the current financing period. Beneficiaries include school pupils, higher education students, trainees, teachers, trainers, youth workers, sports coaches, and also learners in vocational education and training and adult learning staff
- **Reach out to people from all social backgrounds:** Through new formats and easier access for smaller and grassroots organisations, the new programme will make it easier for people from disadvantaged backgrounds to participate
- **Build stronger relations with the rest of the world:** Mobility and cooperation with third

countries will also be boosted, through a combination of physical and virtual mobility.

- **Focus on promoting forward-looking study fields:** The strengthened programme will give more attention to study fields such as renewable energy, climate change, environmental engineering, artificial intelligence or design.
- **Promote a European identity with a travel experience**

Read the full press release here: http://europa.eu/rapid/press-release_IP-18-3948_en.htm



European Education Area: New initiatives announced by the European Commission

In May 2018 the European Commission released a second package of initiatives towards a European Education Area by 2025. It includes a new set of measures for Education, a new Youth Strategy, and a new Agenda for Culture. The new initiatives aim to enhance learning mobility and educational opportunities in the EU, empower young people, in particular by encouraging them to participate in civic and democratic life, and harness the potential of culture for social progress and economic growth in Europe. As part of the initiatives announced, work continues on other aspects of the European Education Area by 2025. The overarching Communication on 'Building a Stronger Europe' outlines plans for a European Student Card which is designed to boost learning mobility by reducing administrative burdens and costs for students and education and training institutions. The Commission



plans to implement it by 2021 as a visible symbol of European student identity.

Read the full press release here: http://europa.eu/rapid/press-release_IP-18-3704_en.htm

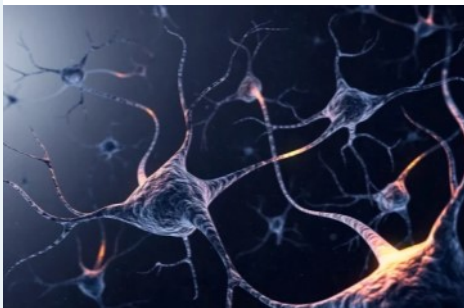
SCIENCE NEWS

Edited by *Giannis Kostikas (Science View)*



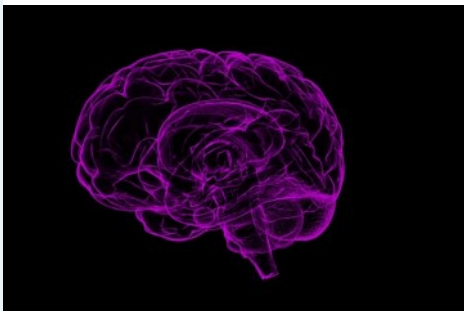
Astronomers have discovered a large underground lake of liquid water lurking just below the surface of Mars. The find could end a more than century-long debate over whether or not the Red Planet still has liquid water. The newfound lake stretches some 12 miles from end-to-end, and was discovered using a radar instrument called MARSIS on board the European Space Agency's Mars Express spacecraft, which first reached Mars nearly 15 years ago. The results were published on 25 July in the journal [Science](#).

<https://goo.gl/EtEpBo>



UCLA neuroscientists reported on May 14th that they have transferred a memory from one animal to another via injections of RNA, a startling result that challenges the widely held view of where and how memories are stored in the brain. The finding from the lab of David Glanzman hints at the potential for new RNA-based treatments to one day restore lost memories and, if correct, could shake up the field of memory and learning. The results, said Glanzman, suggest that memories may be stored within the nucleus of neurons, where RNA is synthesized and can act on DNA to turn genes on and off.

<https://goo.gl/Ywisit>



New insight into the shape-shifting nature of a tau molecule just before it begins sticking to itself to form larger aggregates comes from a study from the University of Texas Southwestern Medical Center. The finding offers a new strategy to detect Alzheimer's disease before it takes hold. "This is perhaps the biggest finding we have made to date, though it will likely be some time before any benefits materialize in the clinic. This changes much of how we think about the problem," said Dr. Marc Diamond, Director for UT Southwestern's Center for Alzheimer's and Neurodegenerative Diseases, can self-replicate.

<https://goo.gl/MVU1QM>



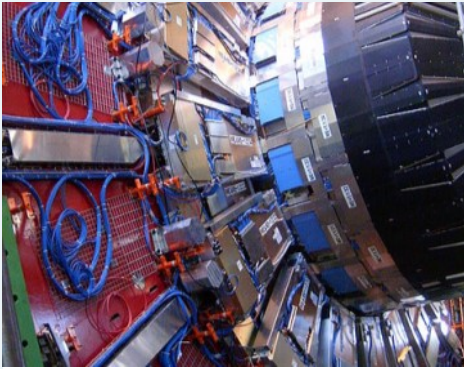
Astronomers looking for stuff in the outer Solar System have received a huge and unexpected surprise - the accidental discovery of 12 previously unknown moons in orbit around Jupiter. This brings the total of known Jovian moons to 79. The newly discovered satellites increase Jupiter's lead in the Solar System as the planet with the most moons - although the space around Saturn is pretty crowded, too. The team, led by astronomer Scott S. Sheppard of the Carnegie Institution for Science were using a more powerful telescope than ever before, allowing the team to peer in at higher resolutions, across a wider field of view than other observations in the past

<https://goo.gl/vJNDBv>



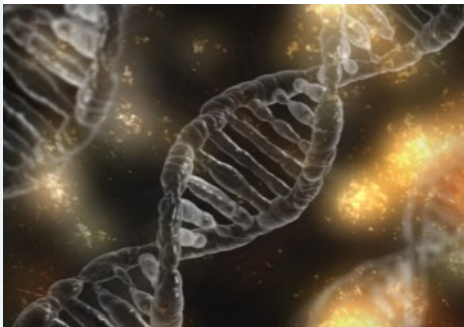
A delicate baby snake with a remarkably well-preserved skeletal structure is the first of its kind ever found fossilized in amber. The fossil is about 2 inches in length, and has 97 preserved vertebrae. At 99 million years old, the fossil is also the oldest snake known from a forested environment, paleontologists revealed on July 18th in the journal [Science Advances](#). The authors named the new species of snake *Xiaophis myanmarensis*. It's likely related to some modern groups of snakes found in Southeast Asia, including nonvenomous Asian pipe snakes and sunbeam snakes, says study leader and National Geographic Explorer Lida Xing of the China University of Geosciences."

<https://goo.gl/Gd8ZUV>



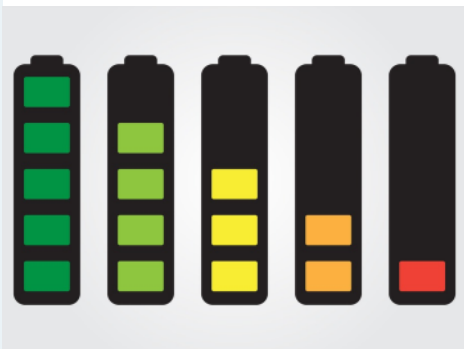
The Large Hadron Collider (LHC) is officially entering a new stage. On 15 June, a ground-breaking ceremony at CERN celebrated the start of the civil-engineering work for the High-Luminosity LHC (HL-LHC): a new milestone in CERN's history. By 2026 this major upgrade will have considerably improved the performance of the LHC, by increasing the number of collisions in the large experiments and thus boosting the probability of the discovery of new physics phenomena. While the LHC is able to produce up to 1 billion proton-proton collisions per second, the HL-LHC will increase this number, referred to by physicists as "luminosity", by a factor of between five and seven, allowing about 10 times more data to be accumulated between 2026 and 2036.

<https://goo.gl/zXAuUn>



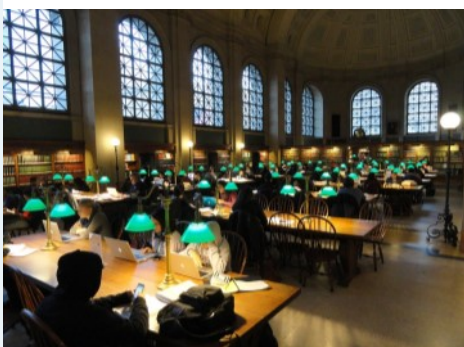
If you rewind back to prebiotic times, when no life was on Earth, there were just molecules that could self-replicate. From complex self-replicating molecules, life originated. Evolution could be partly based on environmental adaptation and not just random mutations, re-opening a centuries-old debate between Charles Darwin and Jean-Baptiste Lamarck. A fruitful interview of Professor Thomas Carell from Ludwig Maximilian University in Munich, Germany, on study of DNA flags, our view of DNA, the debate about evolution and the origins of life.

<https://goo.gl/73rYpV>



Researchers have identified a group of materials that could be used to make even higher power batteries. The researchers, from the University of Cambridge, used materials with a complex crystalline structure and found that lithium ions move through them at rates that far exceed those of typical electrode materials, which equates to a much faster-charging battery. The materials' physical structure and chemical behaviour give researchers a valuable insight into how a safe, super-fast charging battery could be constructed, and suggest that the solution to next-generation batteries may come from unconventional materials. The results are reported in the journal *Nature*.

<https://goo.gl/N6UeNN>



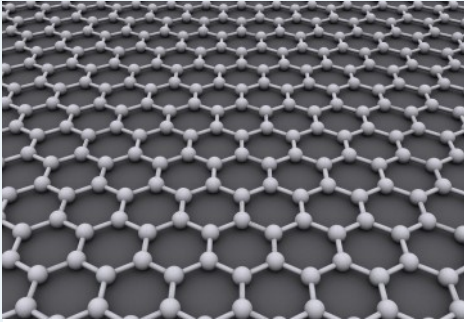
'The time has passed where you write a report with a band of experts and pass it on to the public,' said Dr Julie Maxton, executive director of the UK's Royal Society. 'You need to find out what worries people.' She was speaking at one of a number of sessions discussing the role of scientific advice in modern society at the EuroScience Open Forum (ESOF), held in Toulouse, France, from 9-14 July. The scientific community needs to listen more to people outside academia if it wants to continue to help politicians create good evidence-based policies that will benefit the public, a conference has heard.

<https://goo.gl/54Ur6f>



On 12 July, astronomers announced that, for the first time ever, they had traced a superfast cosmic neutrino to its source — an active galaxy known as TXS 0506+056, which lies 4 billion light-years from Earth. The find implicates such active galaxies as a source of fast-moving charged particles called cosmic rays, which bombard our planet continuously. The origins of cosmic rays had puzzled researchers since the particles' discovery in 1912. The discovery started at the IceCube Neutrino Observatory near the South Pole in September. Deep inside the Antarctic ice sheet, a grid of detectors traced the path of a single neutrino in 3D.

<https://goo.gl/hCoq45>



Physicists have theoretically shown that, by applying a magnetic field to a small, irregularly shaped graphene flake, the flake becomes a quantum hologram of a black hole, as published in a recent issue of Physical Review Letters. This means that the graphene flake recreates the spatial structure and characteristic properties of a black hole, but in a much smaller, lower-dimensional system. Unlike other systems that have been proposed to demonstrate the SYK model, the new quantum phase of graphene does not require any advanced fabrication techniques and should be realizable using existing technology.

<https://goo.gl/oMVNYM>



Humans are using up the planet's resources so quickly that people have used a year's worth in just seven months, experts are warning. And the rate at which we are consuming the Earth's natural resources is still speeding up. This year the annual date when people have caused a year's worth of ecological damage – Earth Overshoot Day – comes two days earlier than last year. The experts say it means humanity is currently using nature 1.7 times faster than our planet's ecosystems can regenerate. The costs of the "ecological overspend" include biodiversity loss, deforestation, soil erosion, fresh water scarcity and the buildup of carbon dioxide in the atmosphere, leading to a vicious circle of climate change and more severe droughts, wildfires and hurricanes.

<https://goo.gl/2azC2e>



The mystery of how the gigantic rocks of Stonehenge were transported may finally have been solved. A new [study](#) claims the huge hunks of hardened earth and minerals were moved from Welsh quarries on a 'stone highway' encompassing roads and rivers. Experts have long been baffled by how the massive boulders were transported from Wales to Salisbury Plain. Now, they believe they may have found the source for the stones as well as the route used to deliver them from Pembrokeshire to Wiltshire. New analytical techniques, including advanced imaging scans, have prompted renewed scrutiny of his work, which the researchers used as the basis for their study.

<https://goo.gl/qEdppl>



NASA is preparing to launch a historic probe to "touch the sun" — which scientists hope will crack decades-long mysteries about our star — in early August. Early on an August morning, the sky near Cape Canaveral, Florida, will light up with the launch of Parker Solar Probe. No earlier than Aug. 6, 2018, a United Launch Alliance Delta IV Heavy will thunder to space carrying the car-sized spacecraft, which will study the Sun closer than any human-made object ever has. On July 20, 2018, NASA introduced Parker Solar Probe's science goals and the technology behind them at a televised press conference from NASA's Kennedy Space Center in Cape Canaveral, Florida.

<https://goo.gl/bHR5cy>



Until recently, if you asked most experts when the first human beings arrived and settled in North America, you'd get an answer along the lines of 13,500 years ago. But over the last few years, evidence has been mounting that humans arrived at the continent earlier. And now a massive discovery of hundreds of thousands of stone tools suggest we might have to push the date of human settlement back by at least 2,500 years. All the signs from the Gault dig seem to suggest that the tool-making technology of the Clovis period spread across a population that was already established and indigenous, rather than one that had just arrived, the researchers conclude.

<https://goo.gl/s7YZ4D>

ABOUT Science Views

“Science Views” is a two month bulletin published by Science View, that focuses on EU and Greek R&D, policy, science and innovation news. The views expressed in Science Views are those of the individual writers, and not necessarily those of Science View. Unsigned articles come from selected press releases from scientists, research institutions and the EU.

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ABOUT SCIENCE VIEW

Science View is a science journalists’ association based in Athens. Science View attempts to strengthen Science Journalism in Greece. SV also promotes science communication activities between the scientific community and the wider public by implementing events, video productions and scientific documentaries, science communication trainings and e-learning courses, printed and electronic publications, newsletters, online magazines, websites, information portals and brochures. Meet the [SV team](#) and check out our [projects](#) and our [services](#).

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Publisher’s CV



Mr. Menelaos Sotiriou is a science writer and communicator. He was the editor of the official Research and Technology online magazine in Greece, E&T (www.et-online.gr) that was published from the General Secretariat of Research and Technology. He started his professional career by developing various Management Systems, mostly in the field of Education as well as Health Care and Telecommunications, in over 40 public and private Organisations. He is a certified auditor and has realised over 50 audits, mostly in the field of Quality Management Systems and Assurance. The last twelve (12) years he is running (project management) and organising European and national projects for several institutions (including research institutions) mainly in the areas of new and innovative technologies (ICT). He has been involved in more than 30 EU projects in the areas of SiS, SSH, ICT, Research for the Benefit of SMEs. He has vast experience in networking activities as the project Coordinator of EUROSIS Project that is the Network of the Science in Society NCPs. (Greek NCP for SiS Programme). During this project he has organized a lot of brokerage events as well as info days / trainings concerning the participation of institutions in the specific programme. He is holding the position of President of Science View (www.scienceview.gr) a nonprofit, non governmental organization that has expertise in Science Communication and Science Journalism. He is specialised in science communication, organisation of events (science cafes, conferences, science festivals, exhibitions, science weeks), publications, science writing, outreach activities for young students (mainly in the fields of mathematics, physics, astronomy and health), and creativity in science education (Introduction of creative ways to provide science education like science theatre, music and science). Finally, he is included in the Evaluators’ Data Base of the European Commission for the HORIZON2020 and of the Science Foundation Ireland (SFI) and also he had participated in several EC meetings as an expert in Science Communication and Journalism issues.

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