



We have lift off Introducing the Ecsite Space Group

**Marc Moutin, Cité de l'Espace,
France**

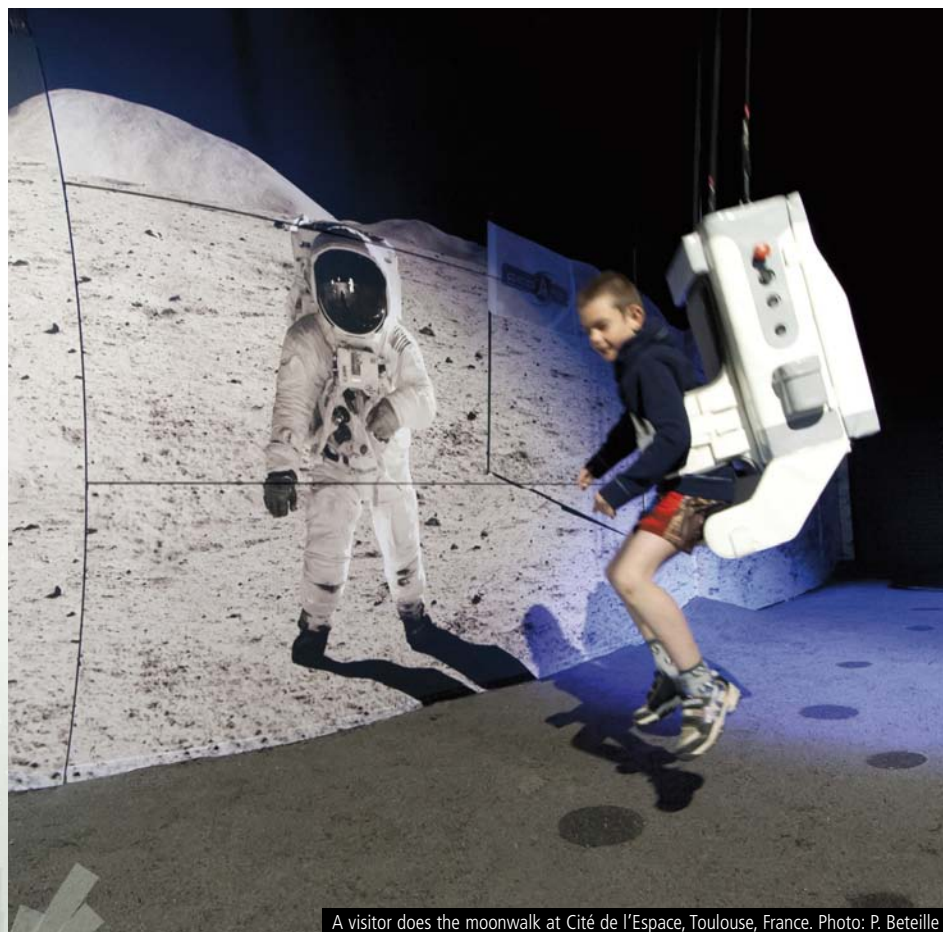
**Maria Menendez, European Space
Agency, France**

**Ana Noronha, Ciência Viva,
Portugal**

Space is an endless source of inspiration for youth and adults. Some are attracted by the exploration of the universe, others by technological challenges and applications. Space exploration's benefits for citizens are growing fast and are impacting telecommunications, navigation, the environment, and security issues, to name a few examples. The Space industry also creates jobs and opportunities, and plays an important role in the European economy.

Issues related to Space sciences, technology and civil applications have become interesting for institutions engaged in science communication. Science centres, museums and other science communicators have roles to play in Space-related issues, namely by turning information into public engagement, and by illuminating Space education with their expertise, independence and creativity. Science communicators can engage citizens with Space science and technology and, as impartial platforms, can provide neutral spaces where citizens, scientists, educators and specialists from the industry can meet and debate key issues.

Communicating about Space may not be an easy task for non-specialists. During the 2012 Ecsite Pre-Conference in Toulouse, France, a workshop entitled Communicating European achievements in Space, was organized by Ecsite, Cité de l'Espace and the European Space Agency (ESA).



A visitor does the moonwalk at Cité de l'Espace, Toulouse, France. Photo: P. Beteille

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website under News > Newsletters

Next issue:
The maker movement

During the workshop, representatives from science centres, industry and Space agencies (including the French space agency, CNES) debated how to communicate Space topics to the general public.

The Space discussion gained momentum during the conference and a task force was created which proposed an Ecsite Space Thematic Group to include one representative from ESA, (Maria Menendez, Head of Exhibitions and Images, ESA, Paris, France) one from a science centre specializing in Space (Marc Moutin, Director of exhibitions at the Cité de l'Espace, Toulouse, France) and a representative from a non-Space oriented science centre (Ana Noronha, Executive Director of Ciência Viva, Lisbon, Portugal). Ecsite's Thematic Groups bring science communication professionals together to exchange ideas and best practices on specific topics within the field.

A follow-up meeting was held in October 2012 at Città della Scienza in Naples, Italy, which was attended by representatives from science centres, industry and from the Italian Space Agency (ASI) in parallel to the International Astronautical Congress. The Space Group was formally approved by the Ecsite Board in November 2012, in Luleå, Sweden.

The Space Group will cross-fertilize Space communication knowledge between science centres, museums, ESA, national space agencies,

research institutions, universities and industrial companies. The group will also serve as a knowledge hub about the Space field, and will keep tabs on engagement activities for European citizens, as well as develop educational and engagement activities related to Space science and technology.

Who can be a member of the Space Group?

The group is open for collaboration with all science communicators to help bring Space into their projects and activities. Get involved by registering for the Pre-Conference Workshop from the Space Group, Are you ready for Rosetta? The Ecsite Annual Conference hosts its Pre-Conference series in Gothenburg, Sweden on 4 and 5 June. The Space workshop will help facilitate joint projects to engage visitors with the limitless educational potential of Space exploration.

For science centres, museums, planetariums, companies and other science communicators, joining this group translates to getting closer to Space professionals and also means being better informed about Space news, programmes and discoveries. The group will also offer opportunities for sharing experience, expertise, knowledge and tools.

Next steps

The Space Group will venture to support the joint development of projects and activities, so that Space communication aimed at different publics becomes more efficient. It will take advantage of already established European networks within Ecsite and within the European Space network connected to ESA and its member states. The group will benefit from the networking capacities of ESA and Ecsite.

The group will launch its work by creating a community to design joint events, educational tools, workshops, exhibitions, and engagement projects. The group will seek to establish a better understanding of European Space activities and programmes and to exchange best practices.

For Europe's main Space actors (ESA, national agencies, industries, research institutions and academia), Ecsite's Space Group will serve as a dependable structure for close collaboration among science communication professionals throughout Europe.

Marc Moutin, Ana Noronha, and Maria Menendez are co-chairs of the Ecsite Space Group and guest editors of this edition of the Ecsite Quarterly Newsletter.

TRANSMISSIONS FROM THE SPACE GROUP:

"Space and astronomy have always been one of the main lines of work at Parque de las Ciencias. The Ecsite Space Group offers us the possibility to share with other members ideas, projects and to start a new line of collaborative actions."

Carmen Guerra, Parque de las Ciencias, Spain

"The growing interest in European space programmes and the numerous representatives of museum and science centres give CNES the opportunity to present and share expertise and ideas and plan possible future cooperation."

Elisabeth Moussine-Pouchkine, Centre National d'Etudes Spatiales (CNES), France

"I'm really excited that Ecsite has set up this Space Group. Europe has probably the largest community of planetary scientists in the world - and an increasing number of space entrepreneurs, including teams competing for the Google Lunar X PRIZE - but studies continue to show that public awareness of European space activities is low. Science centres and museums provide a unique forum not just for communication of activities but for real engagement and dialogue with citizens of all ages."

Anita Heward, Google Lunar X PRIZE, Europlanet, UK

"We think that space is the easiest avenue for communicating and recruiting for science. Therefore we choose to increase our activity in the space science communication field, represented by the Ecsite Space Group."

Filip Nicolaisen, Norwegian Centre for Space-related Education (NAROM), Norway

Borne from a midsummer night's dream How Portugal's citizen engagement with Space began with telescopes on a beach

Carlos Catalão Alves, *Ciencia Viva*, Pavilion of Knowledge, Lisbon, Portugal

It is widely agreed that engaging the public with science is often best done by letting people play with it in places they love; Portugal's beaches are a great case in point.

Fifteen years ago, *Ciencia Viva*¹ launched *Seashore Astronomy* and it grew into one of Portugal's favourite and most successful science outreach programmes. Every year thousands of people line up on beaches and travel into Space through the lens of a telescope. This large-scale, nationwide, outdoor campaign encourages everyone to make their own scientific observations guided and supported by professional astronomers. "Co-observation with experts" is the critical factor in the learning process; a structured dialogue that takes people from "simply seeing" to "seeing with knowledge", thereby experiencing the dynamic insight that comes when theory enriches the empirical evidence of the eyes.

Heading inland

Over time *Ciencia Viva*'s astronomers and Space experts have taken the project inland, to rural or urban spaces, in suitable observation sites: tall towers, high mountains, uninterrupted vistas.

Studies in science communication portray this person-to-person interplay as a kind of social movement. It creates positive and meaningful dialogue between the wider public and the specialised knowledge network that makes up universities, scientific societies, research institutions, science clubs, civic movements and schools. The warm, human quality that characterises encounters with real "people of science" has greatly boosted the popularity of the science-oriented, combined leisure-learning activities throughout Portugal.

With thousands of outdoor observation activities each year, *astronomy has become one of the engines driving the growth of scientific culture*. People who do not think of themselves as scientists are learning to think scientifically by making their own observations and drawing their own inferences. Astronomy is a particularly suitable vehicle for this: it is mysterious and exciting, the sky belongs to everyone, and telescopes are available in ordinary stores, online, and even on smartphones. Making it work requires the enthusiastic involvement of experts as mediators who are eager and able to build on the appetite for understanding Space. Involving Portugal's scientific community has helped to generate a grass-

roots science movement, with astronomy clubs and associations popping up like mushrooms in many schools and villages in the country.

The role of local government

One important result of *Ciencia Viva*'s Space programme is the growing interest from city councils in integrating these activities into mainstream cultural programmes. As a result of the astronomy craze, Space science is now a cool brand which is exciting and enriching with high public appeal and a positive impact on educational standards, local tourism and the wider economy.

This helps to explain why the *Ciencia Viva* network of 20 Portuguese science centres has acquired a prominent role as a go-between linking the academic world and the public at large. An idea that began as a midsummer night's dream, a short episode of holiday fun, became a solid movement promoting engagement in, and excitement about Space science across the country.

The trigger for science centres' success with a topic is often rooted in support from local government which reflects the growing popularity of Science. The *Ciencia Viva* science centres became platforms for the most dynamic actors and stakeholders operating at the local and regional levels. An example of this spiral effect was the creation of the Constanca Science Centre, which is entirely dedicated to astronomy and Space.

Education spinoffs

Using the widespread fascination with the mysteries of Space as a framework for wider learning has become a popular strategy across education. By collaborating with schools and universities, our centres are enthusing teachers about using Space as a motivating and productive theme to integrate and unify many areas of the academic curriculum. Our close links to education programmes from the European Space Agency (ESA) and the National Aeronautics and Space Administration (NASA) have fostered a new generation of astrophysicists and a number of Space-related spinoffs. Science centres now regularly provide venues for major communication events, such as video-conferences with astronauts at the International Space Station, participation in international Space education projects like *Mission X: Train like an Astronaut*, *Eduspace* and *Cansat*, parabolic flights and national Space weeks. They also support teachers' professional development sessions and research apprenticeships at Space facilities.



What's written in the stars? A visitor points skyward during *Ciencia Viva*'s Seashore Astronomy programme

Strong participation in World Space Week (WSW) shows how the world's network of science centres can take Space engagement forward using activities with national impact. World Space Week provided an opportunity for the Pavilion of Knowledge in Lisbon to showcase the new Portuguese space industry, the Portuguese participation in the European Space Agency, and also a rich mix of local and regional examples of Space-based education in schools and science clubs.

Engaging citizens

Outside formal education, science centres and museums are using Space exploration to drive wider public engagement with science and technology. Their advantage over TV and other media is their unique ability to put people in direct contact with the phenomena inherent in Space science, the tools it uses, and the people who understand these tools. Where else can you play with a space suit, touch a spacecraft or observe the effects of microgravity in a *clinostat*? This popular curiosity for learning has led science centres and museums to showcase Space research with its applications to everyday life. In turn, high visibility events make science centres and museums especially suited for high-profile policy or industry events in the field. Science centres' neutrality as hosts lends credibility to the debates that happen within their walls about the political and economic implications of Space. Through proactive engagement activities, our vision is to create a more knowledgeable public that participates in rational debate and consultation that will shape and nourish long-term momentum in scientific research.

¹ The Portuguese National Agency for Scientific and Technological Culture



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The Space agency for Europe

The European Space Agency (ESA) joins forces with Ecsite to bring Space to the fore of science communication

Maria Menendez, Head of Exhibitions and Images, ESA, Paris, France

Since 1975 the European Space Agency (ESA) has been pooling the resources of its member states and leading cooperation with other nations to build a European Space capacity, undertaking programmes and activities far beyond the scope of any single European country.

ESA develops the launchers, spacecraft and ground facilities needed to keep Europe at the forefront of global Space activities.

Today it launches satellites for Earth observation, navigation, telecommunications and astronomy, sends probes to the far reaches of the solar system and cooperates in the human exploration of Space. The European Space sector has been constructed over the last 40 years through close cooperation between the member states of ESA and of the organisations that came before it.

Thanks to these states and organizations, today's Europe has an integrated, harmonised Space industry, excellent laboratories and world-class scientific teams: these are major assets to Europe's knowledge, innovation, competitiveness and growth.

Where we are located

ESA's headquarters are in Paris which is where policies and programmes are decided. ESA also has sites in a number of European countries, each of which has different responsibilities:

- The European Astronauts Centre in Cologne, Germany (EAC)
- The European Space Astronomy Centre, in Villanueva de la Canada, Spain (ESAC)
- The European Space Operations Centre in Darmstadt, Germany (ESOC)
- The ESA centre for Earth Observation, in Frascati, near Rome, Italy (ESRIN)
- The European Space Research and Technology Centre, Noordwijk, the Netherlands (ESTEC)

A new ESA centre has opened in the United Kingdom, at Harwell, Oxfordshire. ESA also has liaison offices in Belgium, the USA and Russia as well as a launch base in French Guyana and ground/tracking stations in various parts of the world.

ESA has 20 member states: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom. Canada also sits on the ESA Council and takes part in certain programmes under a cooperation agreement. Estonia, Slovenia, Hungary, Cyprus, Latvia, Lithuania, the Slovak Republic and Malta have Cooperation Agreements with ESA.

Space for knowledge, competitiveness and growth

Space has always been a source of inspiration, of knowledge and of dreams. Humanity always needs new challenges to meet and new horizons to reach. Space is also important for the independence, security and prosperity of Europe. It is an enabling tool that gives Europe's decision-makers the ability to respond to critical challenges such as global climate change and global security.

It brings a significant contribution to Europe's growth and employment by providing indispensable technologies and services to support our knowledge society, it heightens understanding of our planet and universe and contributes to European identity, cohesion and security, inspiring future human potential and drawing young people to scientific and technical education. At this time of unprecedented economic challenge, Space is proving to be an anchor of stability and a counterbalance to negative trends. Space-based services are more and more part of our daily life and represent a growing element of the economic and social value of Space.

Working with Ecsite

Communication with the general public is one of the top priorities for ESA in the years to come. Our goal is to present European Space activities in a striking, impressive, clear and concise manner, to stimulate interest and leave the visitor wanting to discover more about Space.

Partnering with global and well-known organisations that share ESA's values and concerns is key to fostering public engagement. Cooperating with Ecsite will allow ESA to:

- build joint projects and activities and facilitate the exchange of ideas and best practice on Space activities, and
- extend to other institutions the cooperation we have already established with a number of Space institutions, centres and museums in Europe.

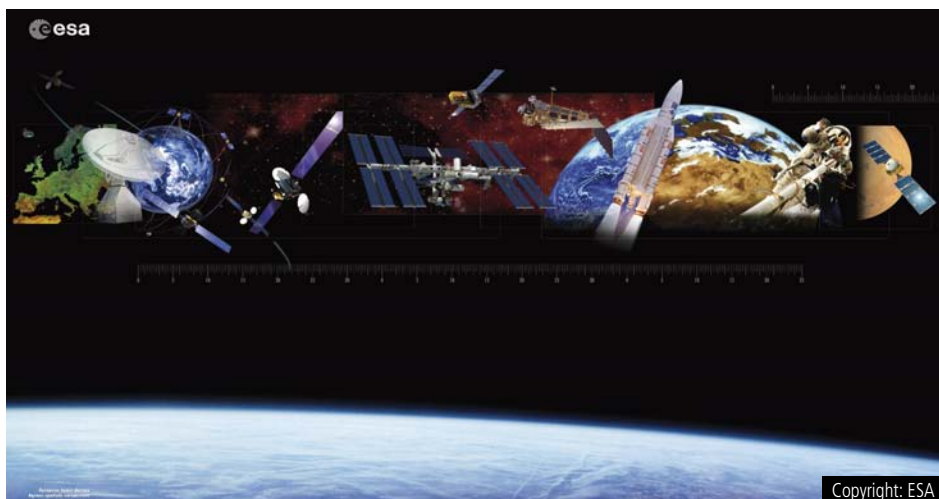
Moreover, our participation with Ecsite allows science centres and museums to meet and network around the topic of Space, and take advantage of what our pooled resources can offer toward communicating European achievements in Space to the public.

Why an Ecsite Space Group?

For the first time, Space was the theme of the Ecsite Annual Conference in 2012. But already at the end of 2011, we had begun to work with Ecsite and the Cité de l'espace to build a Thematic Group dedicated to Space. The Space Group came into existence because of the growing interest in European Space programmes shown by a number of museums, science centres and other similar institutions.

ESA was present at the inaugural workshop of the Space Group at Ecsite 2012 to promote European achievements in space; and we will be present at the Ecsite 2013 Pre-Conference Workshop on 4 and 5 June in Gothenburg to make museums ready for Rosetta's comet encounter in 2014.

Learn more about ESA: www.esa.int Discover and download ESA exhibition material: www.esa.int/exhibitions



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Showing Space, minus a planetarium

Communicating Space represents some challenges. Here are some common questions about this specialized task

Marc Moutin, Exhibitions Director, Cité de l'espace, Toulouse, France

How do we open a visitor's mind and let them discover that Space is not just about stars, rockets and astronauts?

Space, though invisible, is everywhere in our daily lives. Beyond stars, rockets or astronauts, talking about Space is telling stories about diverse activities such as fostering communication and localization, providing remote medical consultations, forecasting the weather, rescuing navigators, following wild animals, monitoring Earth's environment parameters ...and the list goes on. After fifteen years of operations and many visitor evaluations, Cité de l'espace decided to clarify diverse Space topics by organizing permanent exhibitions in thematic sections, giving our visitors an overview of the main domains of Space activities and their benefits for humanity: Earth monitoring and citizen applications, solar system exploration, far universe observation, and most crucially, how to get to space.

How can we make technological topics such as engines, rockets, satellites, probes, and cutting edge complex equipment accessible to the average visitor?

Building learning pathways helps to make sense of complex topics and allows us to organize content in an easy and affordable conceptual presentation. It was the first important change we proposed for our new permanent exhibitions: Install more immersive scenography using a graphic approach that varies according to themes. We choose to tell stories and not only present technical aspects, missions and facts, but we also showcase human experiences; the

women and men who work behind the scenes where space missions are built, covering a large diversity of jobs, not only in science and technology. We hope this will inspire future careers.

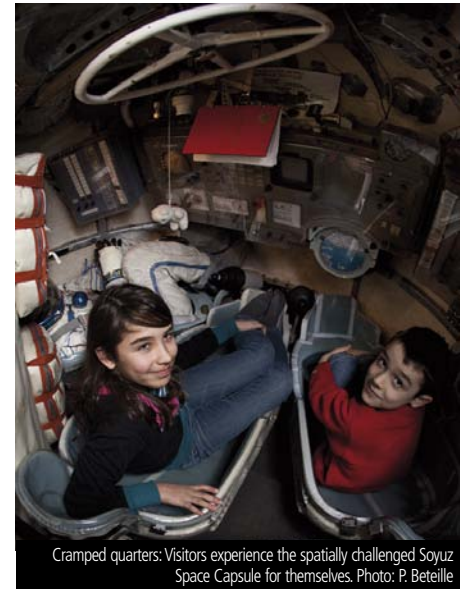
How do we help people understand concepts which are far removed from their everyday lives such as extreme temperatures, distances, sizes, and energies?

If immersive scenography helps visitors feel comfortably removed from their usual environment, then the best way to introduce them to difficult scientific or technological notions is to introduce elements of surprise or play - suited to groups and individuals. Mural frescoes, immersive audiovisuals, surprising objects, games, quizzes, or interactive programmes that bring visitors into a mission, are many ways to diversify visitor interaction with content. As education is our main goal, we must hold the visitor's attention in order to pass on pedagogic messages. In addition to, or built in to exhibitions, demonstrations such as "wide properties" or workshops such as "build your comet" help the visitor get answers from an explainer and go deeper into the content.

How do we bring real objects to visitors, such as most of the Space vehicles that leave Earth and rarely come back?

Except in the United States and Russia, where Space missions have been numerous, Space museums in Europe aren't based only on collections. But discovering Space machines helps our visitors realize the size and complexity of spacecraft. The learning impact of full-sized and real objects - which are most often real test models or mock-ups - is unparalleled. You'll never forget boarding Mir

station or a Soyuz capsule and realizing how small these big objects seem when you discover them from the inside. Such full-sized objects are rare, and you need a park or vast rooms in which to exhibit them. Smaller, but perhaps more impressive, are objects such as space rocks from the Moon and Mars, which are high points of a visitor's experience and allow them to really touch Space.



Cramped quarters: Visitors experience the spatially challenged Soyuz Space Capsule for themselves. Photo: P. Betelle

How can we make it possible for visitors to experiment with space?

Feeling and experiencing Space are key expectations of our visitors, especially the youngest. Trying to meet their needs, we innovated and developed prototypes involving visitors in special equipment reproducing specific space conditions such as the lower gravity sensation of walking on the Moon or Mars, or reproducing some space training exercises such as disorientation.

As Space exploration began only 50 years ago, how can we put space developments into perspective within human history?

Organizing events at a local, national, or European level (such as Researcher's Nights), are excellent ways to build links with historical facts and dreams, to imagine the possible future or to react to present Space news and make it possible for visitors to meet scientists. These free evenings also make it possible for industry and small and medium enterprise (SME) partners to present their new technologies or applications. Cité de l'espace plays a big role in building links between visitors and industry. Exhibiting space without a planetarium is a very exciting challenge. However, if you are able to house a big screen such as an Imax 3D - as Cité de l'espace is lucky enough to have - it will bring your visitors a special kind of immersion, transporting them into orbit with perfect educational simulations and amazing views. Space exploration through the big screen is something very emotional that your visitors will never forget.



Visitors interact with state-of-the-art exhibition equipment at Cité de l'espace, Toulouse, France. Photo: P. Betelle

An out-of-this-World Space Week

Putting the spotlight on Space through grants to UK science centres

Michaela Livingstone, Special Projects Manager, UK Association for Science and Discovery Centres

Every year from 4 to 10 October the world joins in celebrations of Space activities for World Space Week (WSW) which was first designated by the United Nations General Assembly in 1999. Events, workshops and exhibitions across the planet are held to illustrate the variety of Space programmes, show the benefits we gain from these, and inspire young people.

The UK has a rich and dynamic science centre and museum sector, involved across all areas of informal science learning. Through a partnership with the Science and Technology Facilities Council (STFC) we are particularly keen to support activities around the physical sciences. In the 'Explore Your Universe: Atoms to Astrophysics' project we are aiming to reach our shared vision of inspiring a new sense of excitement in young people and their families around the physical sciences through the amazing stories and technologies of STFC.

As part of this overall project we wanted to encourage participation in WSW to increase its visibility in the UK, and take the opportunity to allow people of all ages to explore the wide range of amazing Space-related activities in which the UK is engaged.

Similar to the earlier strand of 'stargazing' grants we previously offered, eight centres were selected through a competitive process to receive a small award which could be used to support any aspect of activities related to WSW. The eight centres were:

- At-Bristol, South West England
- Centre for Life, North East England
- Glasgow Science Centre, West Central Scotland
- Intech, Southern England
- National Museums Liverpool, North West England
- Science Oxford, Central Southern England
- Techniquest Glyndŵr, North Wales
- W5, Northern Ireland

The activities supported by the WSW grants reached over 13,000 students, teachers, and families. There was even a marriage proposal in one of the planetariums!

I asked the centres involved to provide their top tips on what makes a great WSW celebration.

Beyond Astronomy

Space was cited by many as being a 'hook' to inspire many people on all science, technology, engineering and math (STEM) subjects. People didn't just learn about physics, but also geology, climate science, biology, and applications of technology. All this was achieved by looking at how spaceflight affects peoples' minds and bodies, and life on other planets, for example. In addition, science communicator Lee Pullen, who ran At-Bristol's WSW show says, "activities about things that people have heard of before and would like to know more about - rather than introducing a new topic - are generally well received. For example, our show was about rockets. Everyone has heard of rockets and wants to know more!"

Space on your doorstep

Knowing that some amazing Space-related activities happen a lot closer to home can really spark interest for some people. People usually assume exciting things are happening far away in other cities or countries.

For example, Techniquest Glyndŵr's week in North Wales was themed "Wales in Space" and highlighted links of local researchers and companies to exciting developments: for instance, work on the mirrors for the European Extremely Large Telescope (E-ELT) is being done at Glyndŵr University in Wales.

Judith Harvey from W5 in Northern Ireland adds, "for schools, removing barriers to participation, particularly costs such as admission and transport, is important in increasing access."

Working with Space experts

Through its events, WSW was keen to link with research and industrial activities going on in the UK and in the rest of Europe. Many centres said that engaging actual scientists and engineers can work on many levels: It allows visitors deeper insight in to the workings of the Space industry and the big questions researchers are striving to solve, and also incentivises reluctant visitors with the promise of getting to meet

people they might not otherwise have the chance to contact. Most centres had ambassadors from various companies and universities.

A group not to be ignored are local amateur astronomers: they have knowledge and equipment, and are never in short supply of enthusiasm to support Space-related events.

Practical, hands-on approaches

Engaging the public with Space is all about making the topic come alive and bringing it a little bit closer to audiences. Some examples of the activities offered at the centres were building landing pods for 'eggstronauts', designing and launching rockets, tasting space food, handling moon rocks and meteorites, taking pictures of planets, and much more.

The Centre for Life in North West England used iPads and various apps to explore satellites, space technology, climate change and other planets - something that visitors can do on their own smartphones and tablets after the visit, thereby continuing their journeys.

Using actual images captured by astronomers is also an effective way of grabbing visitors' attention; visitors often assume these images are computer-generated.

Other centres attracted new visitors by taking advantage of much-loved science fiction characters, such as Intech's interactions with Star Wars characters.

Media love it!

The 'out-of-this-world' nature of space events can catch the attention of media. Many of the WSW events were featured in national and local listings and "what's on" guides, and received air time on radio. It also provided a chance to have some fun and offer promotions: for example, At-Bristol's free entry offers for kids in Space costumes.

The WSW grant scheme was a pilot initiative. Many of the centres involved pin-pointed a vast array of benefits from developing and delivering the events and we want to build on this, the partnerships and the innovation to make next year's WSW celebrations more integrated, bigger, and better than ever.

ODYSSEUS SCIENTIFIC CONTEST FOR YOUTH

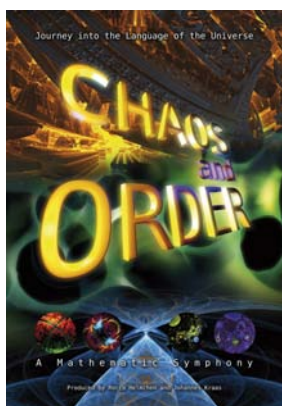
The Odysseus contest, offers the opportunity to pupils between 14 and 18 years old to develop a project on Space exploration, using their knowledge and creativity and compete with their peers from different European countries. The winners will be announced on 1 March and they will be awarded in a special ceremony at Space Expo on April 2013.

Contact: info@odysseus-contest.eu
www.odysseus-contest.eu



Odysseus - A pan-European educational contest on space exploration

CHAOS & ORDER - A MATHEMATICAL SYMPHONY



Audiences are taken on a spellbinding journey of ever-evolving visuals and symphonic-electronic music. Divided into four "movements" (geometric forms, algorithms, simulations and chaos theory) this

show explores the fundamental connections between reality and mathematics, as science and art are fused together in a full dome (360°) celebration of the single language of the universe.

www.domeclub.co.uk

THE TUNIS SCIENCE CITY'S FIRST NATIONAL ASTRONOMY FESTIVAL

Tunis Science City will organise, jointly with local associations, its first National Astronomy Festival on 21-24 March 2013. The purpose is to offer serious amateurs, as well as beginners from all walks of life, an immersive four days of astronomy-related activities.



All the participants will be given an opportunity to gaze at stars and planets through telescopes, to learn more about the cosmos and to meet with internationally renowned scientists and astronomers. The programme will include lectures, workshops, solar observation and astronomy evenings.

Contact: Adel.zouaoui@cst.rnu.tn • www.cst.rnu.tn

CONDITIONS FOR LIFE - SCIENCE AND TECHNOLOGY FOR PRE-SCHOOL TEACHERS

Participants are guided on a journey through the universe starting with the vast cosmos and studying the conditions for life on planet Earth. With science and technology, experiments, drama and themes of sustainability, Navet has developed an in-service training course for pre-school teachers consisting of ten half-days. So far, 541 pre-school teachers have been exposed to the course.



Pre-school teachers learn about conditions for life at Navet

TURKEY'S OPENING WINDOW TO SPACE

Eskisehir Metropolitan Municipality Sabanci Planetarium is the largest Turkey has to offer with a 96-seat capacity. The planetarium reached more than 50,000 visitors since its establishment and satisfies people's curiosity about Space. Visitors of all ages from different cities and with different backgrounds not only enjoy the shows but also take a trip to the universe with the planetarians presentations.

Contact: info@eskisehirbilimdeneymerkezi.com
www.eskisehirbilimdeneymerkezi.com



Mapping the solar system at the Sabanci Planetarium

SCHOOL SPACE PROGRAMME AT LIFE SCIENCE CENTRE

Life Science Centre is now offering space-themed curriculum-linked workshops and planetarium sessions for all ages of school children. From sessions for Early Years groups looking at shapes in the sky, through to workshops exploring experimental evidence for the existence of dark matter for Post 16 students, the Centre's fully-integrated space programme can be booked as stand-alone activities or form part of a full day visit to Life.

www.life.org.uk/education



School children explore space in Life's planetarium

ISRAEL SPACE WEEK

Bloomfield Science Museum Jerusalem celebrated Israel's Space Week from 27 January to 1 February 2013. Students from eight junior high schools participated in a week-long competition to research, understand and build models of our solar system for inclusion in a public exhibition at the museum. The week concluded with a lecture from a NASA astronaut. Israel's Space Week is an initiative of the Israel Space Agency, in the Ministry of Science in memory of Ilan Ramon, Israel's first astronaut, who was killed in 2003 during the Columbia Space Mission.

www.mada.org.il/en



Ilan Ramon, the first Israeli Astronaut (1954-2003)

UNIVERSE IN A BOX

Recognising the unique educational potential of astronomy, EU-Universe Awareness has developed an educational activity kit called Universe in a Box. The box will be used in schools and outreach centres to inspire young children to take an interest in science and technology. The materials include practical activities on a range of topics: the Moon, Earth, Sun, planets and constellations, along with the materials and models required to build models. Available as of mid-2013.

Contact: info@unawe.org • www.unawe.org

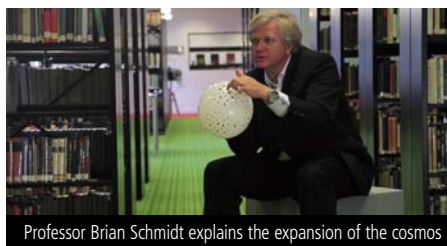


The German version of Universe in a Box

ASTRONOMERS VS. KIDS

On 19 December 2012, EU-Universe Awareness filmed the first episode of an upcoming series of short educational videos called 'Astronomers vs. Kids'. Each episode will be 10-15 minutes long, with an astronomer explaining their cutting-edge research to a group of primary school children. In the debut episode, Professor Brian Schmidt, winner of the 2011 Nobel Prize for Physics, treated the children to a lesson about his discovery of the accelerated expansion of the Universe. The first video is available now at www.unawe.org.

Contact: info@unawe.org • www.unawe.org



Professor Brian Schmidt explains the expansion of the cosmos

THE ORBITARIUM - OBSERVING THE EARTH FROM OUTER SPACE

Are you curious to know how our planet might have come into existence and how it has evolved over millions of years? You can learn this and much more

at the "Orbitarium" in the Swiss science centre, Technorama. Choose from a large selection of different animations: for example, continental drift, volcanism, the ice ages, the climate or global air traffic which are shown on a big globe of 1.5 meters in diameter. If you like, change your perspective and cast a glance at the moon or the sun. Visitors can also catch the multimedia science lecture, "Planet Earth - Cosmic Oasis", shown on a large panoramic screen.

www.technorama.ch/ausstellung/et-cetera/orbitarium/



Visitors are exposed to complex Earth sciences at the Orbitarium, Technorama Science Centre

DASA TAKES OFF WITH NEW FLIGHT SIMULATOR

As of February 2013 at DASA you can experience space and technology in a new way. Discover the new flight simulator FDS A 2 which takes you up into the sky. For the first time in a German museum you are now able to head to more than 24,000 airports all over the world. DASA wishes their visitors a good flight!

Contact: besucherdienst-dasa@baua.bund.de
www.dasa-dortmund.de



Visitors get into the pilot's seat during a flight simulation at DASA

CASSINI: SCIENTIST FOR A DAY CONTEST

More than 180 students from all over Spain have taken part in the Cassini contest. The award ceremony will take place at Parque de las Ciencias next spring and will involve the participation of the European Space Agency (ESA) experts. ESA and Parque will further collaborate in the design and dissemination of space education programs. Dr Javier Ventura-Traveset, Head of the European Space Astronomy Centre (ESAC) Communication and Education Office, indicated ESA's

satisfaction with the work performed jointly with Parque so far. He also noted the interest to further strengthen this cooperation so that Parque becomes one of the key ESA communication and educational partners in Andalusia and Spain.

www.parqueciencias.com

HAVE STARS, WILL TRAVEL

The University of Groningen's Blaauw Observatory and Science LinX science centre have joined forces to offer schools the unique opportunity to explore the universe and find out about current astronomy research with the Kapteyn Mobile Planetarium. This six-metre diameter planetarium comes with a full programme for primary and secondary schools.

www.rug.nl/research/kapteyn/sterrenwacht/
www.sciencelinx.nl



Inside the Kapteyn Mobile Planetarium

WOULD YOU GO TO MARS?

See Facing Mars, at Heureka, the Finnish Science Centre, and decide for yourself. The exhibition demonstrates the real physical, psychological and scientific challenges a trip to the Red Planet would present us. Open from 5 October, 2013 to 23 March, 2014, facing Mars is a travelling exhibition produced by the Ontario Science Centre, Toronto, Canada.

Contact: sami.pihkala@heureka.fi • www.heureka.fi

CONTINIUM TAKES OVER SPACE ACTIVITIES

Continium Discovery Center Kerkrade in the Netherlands has taken over the educational activities of the recently closed eXplorion Science Center in Heerlen (NL). With financial support from the Dutch Foundation for Science Communication, Continium will professionalize various workshops on the themes of astrology, space travel and mathematics, which were originally developed by eXplorion. This way, this content will be updated and will remain available long term for Dutch and German schools.

Contact: c.vanthof@continium.nl

THE 24th ECSITE ANNUAL CONFERENCE: DREAMS, THE SPIRIT OF INNOVATION
Gothenburg, Sweden, Thursday 6 June - Saturday 8 June, 2013



Online conference registration is now open:
www.ecsite.eu/annual_conference

Discount schedule:

- By 20 March: Save 33%
- By 20 April: Save 26%
- By 20 May: Save 11%
- On site in Gothenburg: Pay full price

Save up to 20% on travel with the Star Alliance network

Star Alliance™ member airlines are pleased to be appointed as the Official Airline Network for the Ecsite Annual Conference 2013. Registered participants plus one accompanying person travelling to the event can qualify for a discount of up to 20%, depending on fare and class of travel booked. Stay tuned for full details (promo codes, etc) coming very soon. We will send announcements on Twitter (#Ecsite2013), Facebook, the Ecsite LinkedIn group as well as on www.ecsite.eu/annual_conference

Two fascinating keynote speakers confirmed

- **Dominique Pestre** was first trained as a physicist and then as a historian. He is mainly a social and political historian of 19th and 20th Century physical sciences but has written on more conceptual and



philosophical questions, on technical, political and economic dimensions linked to scientific activity, and on quite contemporary topics. He is currently Directeur d'Etudes at Ecole des Hautes Etudes en Sciences Sociales, Paris, France. He has also taught in various universities since the 1990s including Harvard and the California Institute of Technology.

- **Baroness Susan Greenfield CBE**, is a British scientist, writer, broadcaster and member of the House of Lords. Specializing in the physiology of the brain, Susan researches the impact of 21st century technologies on the mind, how the brain generates consciousness and novel approaches to neurodegenerative diseases such as Alzheimer's and Parkinson's. Susan has written several non-specialist books on issues relating to the mind and brain for the general reader. She appears regularly on radio and television and frequently gives talks to the public and private sector.



Space Group Pre-Conference Workshop: Are you ready for Rosetta?
4 - 5 June 2013

In March and November 2013, two comets may come fairly close to Earth and may be visible in the sky, which will provide an ideal occasion to capture the public's attention for comets and Rosetta. This year, the Ecsite Space Group Pre-Conference Workshop will focus on public engagement and education activities related to the Rosetta mission.

2014 will be the year of the European Space Agency (ESA's) comet chaser Rosetta: It will be the first time in history that a space probe will orbit a comet and dispatch a lander on its surface.

Could life have arrived on Earth from Space? What exactly are comets? Will this mission be the key to our knowledge of where we come from, as the Rosetta stone unlocked the meaning of the symbols carved thousands of years ago?

During this two-day workshop, you are invited to share experience and ideas, and participate

in practical sessions where joint projects will emerge to celebrate the key dates in 2014:

exhibitions, events, educational tools, workshops, etc.

Three keynote lectures will give you up-to-date information about the European Space programme, the exploration of the solar system with a focus on the Rosetta mission, and an overview of related communications activities.

Be ready to engage your public in Space exploration.

Go extra in depth with diverse topics from 4-5 June 2013 during this year's Pre-Conference Workshop series:
www.ecsite.eu/annual_conference/programme/pre-conference



Cité de l'Espace, Toulouse, France. Photo: P. Beteille

VOICES: A PAN-EUROPEAN PUBLIC CONSULTATION INITIATIVE IN SCIENCE AND SOCIETY



Views, Opinions and Ideas of Citizens in Europe on Science (VOICES) is a one-

year-long EU-funded project coordinated by Ecsite which has particularly innovative and challenging objectives. VOICES will run a Europe-wide public consultation initiative, but also offer valuable know-how on methodological and procedural aspects for the structural employment of citizen participation in defining the European research agenda in the framework of Responsible Research and Innovation. VOICES is also extremely important because of the stated commitment of the European Commission to formally include the results of citizen consultations in the main policy document that will shape priorities of European research. Twenty-seven institutions from the Ecsite network are actively involved in VOICES as Third Parties linked to the beneficiary and will be responsible for organizing the focus groups. This spring, experienced moderators from participating Ecsite institutions will support training modules on the content of focus groups developed by VOICES. Read more about VOICES here: www.ecsite.eu/activities_and_resources/projects/voices

HOST A FUTURE ECSITE ANNUAL CONFERENCE: APPLY BY 3 MAY 2013

Ecsite has launched the Call for Proposals to host and co-organise its Annual Conferences 2016 and 2017. Europe's ultimate science communication event, the Ecsite Annual Conference is now famous for bringing cutting-edge developments in the field, over 75 inspiring sessions, debates, workshops, a range of warm social engagements and unparalleled networking opportunities. With 1,000 delegates from more than 50 countries, welcoming an Ecsite conference puts the host on the international science communication scene, and enhances the reputation of the organization and of the local authorities. When selecting the host organisations, Ecsite will look at the extent to which certain requirements are met.

Some of these criteria are essential requirements:

- The Host applicant must be a member of Ecsite
- The application must be complete
- The accessibility of the city must be easy (max of 1 day travel from any large European city)
- The technical requirements in terms of spaces must be met.

To find out more, contact info@ecsite.eu. To find out how to become a member of Ecsite: www.ecsite.eu/members/join-network

ECSITE STATS: A NEW TOOL FOR MEMBERS

Ecsite announces the launch of a brand new service exclusive to Ecsite members. Ecsite Stats is a tailor-made online tool to gather and compare data about the exhibition space, visitors and operations of Ecsite member institutions. It is a tool which relies on data input from you as an Ecsite member, and serves you and the network in a number of ways:

- On an institutional level, Ecsite Stats enables you to benchmark your activities against other institutions across Europe.
- You can generate your own clear and intuitive graphs from your data.
- Ecsite Stats allows you to see the trends, and compare national and European issues among institutions in our field.
- In your role as an advocate for public engagement with science in your country, it gives you and the rest of the network's solid data to facilitate advocacy on a regional, national and European level. And the fact that it is aligned with similar data tools in other regions of the world means it allows us an international voice for science centres and museums.

Sign in to your institution's Ecsite account (not your conference account) and fill in your data today: www.ecsite.eu/join_network_statistics. Contact info@ecsite.eu

Ecsite Corporate Partners

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www.archimedes-exhibitions.de



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www.bruns.nl



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www.techniquest.org



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www.triad.de



Ecsite wishes to thank its Corporate Partners, who support Ecsite network activities. In return, the Partner gains prominence in the Ecsite Newsletter on the website, and at the Annual Conference. If you wish to receive information about becoming a Corporate Partner, please contact the Ecsite Executive Office in Brussels: info@ecsite.eu • www.ecsite.eu

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modeling cities of scientific culture

20-21 JUNE 2013

Turin, Italy



science influences everything we do as human beings – including public policy. Let's enhance the three-way conversation between science, policymakers and society in Europe. Join the conversation in Turin, Italy, this spring.

For Europe, economic competitiveness means evolving into a knowledge-based economy incorporating science communication strategies and policies. So why not start at the local level where change can occur faster and ordinary citizens are more likely to have their say?

www.openplaces.eu

Europe happens, and will continue to happen, in urban environments.

The PLACES project is calling all science communicators, innovators, businesspeople and local-level policymakers to attend the conference Modeling cities of scientific culture from 20 to 21 June 2013, in Turin, Italy.

Your incentives for joining us in Turin:

- » The conference is open to all who are interested in promoting and developing scientific culture – not just cities registered with the PLACES project. **All who attend are eligible for travel and accommodation reimbursements.***

- » Share your city's policy and development challenges with the PLACES community and get new ideas and solutions from all over Europe; PLACES offers cities **strong, adaptable structures to support local-level goals.**
- » High-level keynote addresses including **Anne Glover, Chief Scientific Advisor to the EU.**
- » European Commission speakers will outline future developments for science communication under plans for **Horizon 2020 and new funding programmes.**
- » If you decide to become part of the PLACES project,** you'll enjoy **European-level visibility** in our promotional publications and website, the chance to **influence science communication policy recommendations to the EU**, and a diverse **networking community** of science communicators and policymakers.

Registration for Modeling cities of scientific culture opens **25 February 2013** at www.openplaces.eu/conference.

**Find out how your city can become part of the PLACES project by contacting info@openplaces.eu

*Two people per city/region can attend the conference. Travel and accommodation costs are reimbursed up to 600 euro per city/region. There is no registration fee for the conference.

