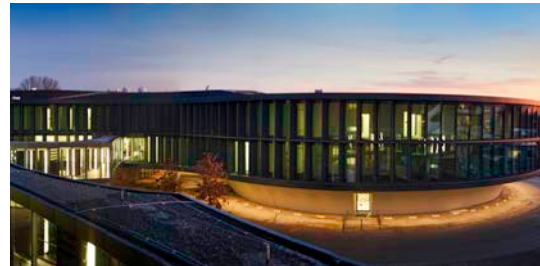


# Public Awareness of Research Infrastructures

Expectations – Experiences – Examples



June 18<sup>th</sup>-19<sup>th</sup>, 2015 – Garching, Germany



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**Venue**

European Southern Observatory (ESO)  
Karl-Schwarzschild-Str. 2  
85748 Garching

**Public Transport**

- Venue stop: Garching Forschungszentrum (U6)
- Social dinner stop: Marienplatz
- Ticket from Airport: Airport Ticket (12€ valid until 6AM the following day in the entire network)
- Ticket from Central Station: Munich XXL (8,30€ valid until 6AM the following day to venue and back)
- Ticket from venue to Munich and back: Munich XXL (8,30€ valid until 6AM the following day)

**WI-FI**

WLAN: ESO  
Username: pluto  
Password: celj7b

**History**

This is the 8<sup>th</sup> of a series of workshops and seminars organised by the ERF-AISBL, the European Association of National Research Facilities.

**Scope of the workshop**

A common task at large scale facilities is to present to their funding bodies as well to the national society the research they conduct with their considerable budget. A similar expectation on public relations (PR) and dissemination concerns large EU funded projects as I3s or bigger consortia. Even though a consensus exists, that good communication is a fundamental part of innovation, the expectations from the funding bodies with regards to science communication activities are unclear, and a well-defined work programme is often missing. The aim of the workshop is to bring together representatives of funding agencies (European and national) with facility and project managers to discuss what should be expected from scientific dissemination activities. Furthermore it should be a forum for PR and information officers to share experience of their work and gain insights into the expectations of funding bodies as well as from the general public.

11:00	Guided tour: Visit to ESO <i>European Southern Observatory</i>
12:00	Registration <i>Eridanus Auditorium</i>
13:30	Speed-networking
14:00	Welcome by Tim de Zeeuw (ESO Director) and Wolfgang Sandner (ERF chair) (chair J. Neuhaus)
14:20	<b>Plenary Session:</b> Of Dogs and Cats – The Communication Challenge for Scientists and Politicians by Claus Madsen, ESO
14:50	<b>Plenary Session:</b> CERN - Education and Outreach by Rolf Landua (CERN) <i>Eridanus Auditorium</i>
15:20	Coffee break
16:00 - 18:00	<b>Parallel Session 1:</b> Public engagement with research infrastructures (chair: A. Rötger, HZB) <i>Eridanus Auditorium</i>
	<b>Parallel Session 2:</b> Communication to Target Groups (chair: C. Madsen, ESO) <i>Fornax Council room</i>
	<b>Parallel Session 3:</b> Risk Communication – interactive session with exercises and role playing (chair: J. Kube, DESY) <i>Crux Council room</i>
19:30	Social Dinner <i>Franziskaner, Residenzstraße 9, Munich (U-bahn stop: Marienplatz)</i>

09:00	<b>Plenary Session:</b> Stakeholder Engagement in Big Science by John Womersley, STFC <i>Eridanus Auditorium</i>
09:30	<b>Parallel Session 4:</b> Facilities under-construction (chair: L. Christensen, ESO) <i>Fornax Council room</i>
	<b>Parallel Session 5a:</b> Best practice (chair: P. King, ISIS) <i>Eridanus Auditorium</i>
10:45	Coffee break
11:15	<b>Parallel Session 6:</b> Social media (chair: P. Piwnicki) <i>Fornax Council room</i>
	<b>Parallel Session 5b:</b> Best practices (chair: P. King) <i>Eridanus Auditorium</i>
12:30	<b>Plenary Session:</b> Challenges and goals of outreach and communication of research at large scale infrastructures by Anke-Rita Kaysser-Pyzalla, HZB
13:00	<b>Report of Parallel Sessions &amp; Closing</b> (chair: J. Neuhaus, MLZ/ERF) <i>Eridanus Auditorium</i>
13:30	Bretzel & coffee
14:30 - 17:00	Guided tour: Visit to FRM II (only for people who registered) <i>FRM II</i>

### **Of Dogs and Cats – The Communication Challenge for Scientists and Politicians**

*MADSEN, Claus (ESO)*

Communication between science and politics is often marred by a lack of cultural and ‘systems’ knowledge between the two areas of activities. For scientists it means targeted communication about a long established, well-tested, fact-based and logically robust system of inquiry to a highly dynamic environment in which decision-taking is influenced by many non-sci-

entific factors and with norms that differ widely from the tenets of science. For the politicians, it involves facing the challenges of evidence-based decision-making, often in situations where the scientific answers are not sufficiently established. The talk discusses some of the communication issues that arise when these very different worlds meet.

### **CERN - Education and Outreach**

*LANDUA, Rolf (CERN)*

CERN's communication strategy goes beyond publishing scientific results. Education and outreach are equally important ways of communicating with the general public, and in particular with the young generation. Over the last decade, CERN has significantly increased its efforts to accommodate the very large interest of the general public (about 300,000 visit requests per year) by ramping up its capacity for guided tours (from 25,000 visitors per year to 112,000 in

2014), by creating six new of state-of-the-art exhibitions and by touring the member states with several traveling exhibitions. The offer for school teachers has also been expanded, to 37 weeks of teacher courses with 1200 participants from more than 50 countries in 2014. The talk will give an overview about these programmes and their impact.

## Parallel Session 1

Public engagement with research infrastructures  
(chair: Antonia Rötger, HZB)

Eridanus Auditorium  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Parallel Session 1 – Public engagement with research infrastructures

- Deficit, dialogue and beyond: How should research infrastructures relate to their publics?
- Open doors with a difference...
- Partnerships for engagement – maximising resources, maximising results
- The Influence of Social Movements on Large Research Infrastructures
- Engaging People for increased awareness - transforming Public Relations (PR) to Human Relations (HR)
- Using travelling exhibitions to reach national audiences

## Parallel Session 1

Public engagement with research infrastructures  
(chair: Antonia Rötger, HZB)

Eridanus Auditorium  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Deficit, dialogue and beyond: How should research infrastructures relate to their publics?

*DAVIES, Sarah (University of Copenhagen)*

There is now a widespread understanding that scientific research does not exist in ‚ivory towers‘, isolated from wider society, but is, and should be, in touch with its users and publics. European countries in particular have emphasised the importance of public engagement as a means of ensuring accountable research, responsible innovation, and well-informed publics (see, for instance, recent discussion of Responsible Research and Innovation in the Horizon 2020 programme).

In this paper I consider what these developments, and in particular different articulations of them such

as ‚public understanding of science‘, ‚public dialogue‘, and ‚science as culture‘, mean for PR and communication of large research infrastructure projects. I outline the history of the European turn to dialogue and reflect on the different normative values that are being promoted: should public engagement be viewed as a means of assuring public support? As a way of setting scientific priorities and directions? As an artistic or cultural experiment? Or all of the above? In discussing the different frames through which public engagement can be viewed, and their histories, I aim to start a conversation about the relation between scientific infrastructure, democracy, and public communication.

## Parallel Session 1

Public engagement with research infrastructures  
(chair: Antonia Rötger, HZB)

Eridanus Auditorium  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Open doors with a difference...

*BOSCARO-CLARKE, Isabelle (Head of Communications and Public Engagement),  
HOLLAND, Laura (Diamond Light Source)*

Diamond Light Source the UK's national synchrotron light source started construction in 2003 and was officially opened in 2007 by Her Majesty the Queen Elizabeth II and His Royal Highness the Duke of Edinburgh. From inception, the senior management instilled a spirit of outreach to the public which culminated in 2007 with the delivery of large-scale open day welcoming 5000 people. The day introduced them to the science which was to be undertaken by the facility as well as the brilliant technology underpinning the facility. As a result of this open day and the post event evaluation it was clear that a similar more manageable offer could be created which would meet both

the demand for visits and which we would realistically be able to deliver on an ongoing basis ...and all on a shoe string budget! 'Inside Diamond' is now an open Saturday event four to five times a year and has evolved into a wonderful interface – awe inspiring for visitors, exciting for the scientific user community and rewarding for staff involved. The talk will share logistics, how we target the 'hard to reach' and important local influencers and stakeholders as well as, critical planning and timing details, budgets and resources required as well as case-studies on what influence this event is having on scientists, science and the public.

## Parallel Session 1

Public engagement with research infrastructures  
(chair: Antonia Rötger, HZB)

Eridanus Auditorium  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Partnerships for engagement – maximising resources, maximising results

*HOLLAND, Laura (Diamond Light Source),  
BOSCARO-CLARKE, Isabelle (Head of Communications and Public Engagement)*

Diamond Light Source hosts a large and growing public engagement programme, welcoming over 5,000 visitors from the public and education each year. In order to continue to innovate and reach new audiences, we have formed strategic partnerships to deliver strong and successful events in education to key audiences.

This session will profile three key partnership events – our Science in Your Future event, aimed at encouraging girls to consider further study in physical science subjects, Engineering Your Future, which promotes a range of Engineering disciplines, both delivered with

STFC, and our A-level Biology day, delivered in partnership with the Research Complex at Harwell, and the Membrane Protein Laboratory (Imperial College London).

We propose to invite scientists from our partner organisations to contribute to the session to discuss their view on what makes a successful partnership.

We will discuss the benefits and risks of such partnership events, and will share our key lessons learned from these programmes.

### The Influence of Social Movements on Large Research Infrastructures

*HARRIS, Hannah (Wellesley College), RUSSO, Pedro (Leiden University)*

Public engagement (PE) initiatives can lead to long-term public support of science. However, most of the real impact of PE initiatives within the context of large-scale science policy is not completely understood. In this talk we will discuss how large grassroots movements led by citizen scientists and space aficionados can have profound effects on public policy. We will also explore the role and relevance of such movements in the policy of large astronomy research infrastructures, present recent cases which illustrate policy decisions involving broader interest groups, and consider new avenues of PE including crowdfunding and crowdsourcing.

### Engaging People for increased awareness - transforming Public Relations (PR) to Human Relations (HR)

*MONTELIUS, Lars (INL - International Iberian Nanotechnology Laboratory)*

*GALVAO, Paula (INL - International Iberian Nanotechnology Laboratory),*

*MACHADO, Isabel (INL -International Iberian Nanotechnology Laboratory)*

Common PR activities are not socially responsive, are hindering the achievement of effective results & not connecting people with the same or complementary interests. By addressing people instead of anonymous public, vital connections are made between sender and receiver. A communication strategy focused on human relations, bring people together and fosters the establishment of a genuine dialogue. Human relations are in this context seen as a product of communicative interactions and target audience achieve a sense being involved. The (INL)International Iberian Nanotechnology Laboratory is a recently established research org. devoted to activities in and around Nanotech.

Monthly, INL invites mainly schools to visit its facilities. A comprehensive explanation of the organization, Nanotech and its applications in daily life is competed with direct contact with the technicians and scientists. Visitors look behind the scenery and overcome stereotype images. They get insight into technical rooms thereby enhancing their understanding of cost behind scientific facilities. The goal is to increase participation of researchers in communicating all dimensions of science and avoid limiting the science communication to the spectacular outcome. Personalization of science favors understanding while close dialogue fosters trust in science. So, the framework designed for school visits, based on direct encounters with scientists can be adapted to different formats groups.

## Parallel Session 1

Public engagement with research infrastructures  
(chair: Antonia Rötger, HZB)

Eridanus Auditorium  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Using travelling exhibitions to reach national audiences

*O'CONNOR, Terence (Science and Technology Facilities Council), HILLIER, Dan (STFC),  
WELLS, Mark (STFC), PALMER, Sophy (RAL STFC)*

We know that nothing beats a visit to a Large Scale Facility to generate lasting interest in science, especially among young people who are our future researchers, technicians and skilled staff. But LSFs are not theme parks, and we must of necessity limit the number of visitors for capacity, safety and operational reasons. In practice, this also limits visits only to those able to easily travel to our locations, which raises equity and diversity concerns. STFC faces these challenges daily at our national laboratories, and through our management of UK involvement in CERN, ESO, ILL, ESRF and others. Our solution was to bring the facilities to the public! From our start in 2011 we are now approaching one million visitors to our series of major national roadshows: firstly in particle physics, then astronomy, crystallography and most recently lasers.

Each was based on a travelling large scale exhibit: a life size replica of the Large Hadron Collider tunnel; a 1/4 scale Very Large Telescope facility, and most recently a life-size model of the Vulcan very high powered laser facility. In this session we will explain how we developed the roadshows to fit the wider UK public engagement strategy, how we engaged our researcher communities, the lessons learnt including what didn't work as well as we'd planned, and give thoughts on how other LSFs may be able to adapt the model for their purposes.

## Parallel Session 2

Communication to target groups  
(chair: Claus Madsen, ESO)

Fornax Council room  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Parallel Session 2 – Communication to target groups

- How to interest the not interested
- Engaging with science and other policy makers
- Focus on users: PR for the Committees Research with Synchrotron Radiation, Neutrons and Nuclear Probes and Ion Beams ([www.sni-portal.de](http://www.sni-portal.de))
- Engaging Teachers with Large Research Facilities
- 10 principles for communicating science in the media
- Paranal observatory as a showcase of European cooperation
- Round-table discussion: different target audiences requiring different communication strategies



## Parallel Session 2

Communication to target groups  
(chair: Claus Madsen, ESO)

Fornax Council room  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### How to interest the not interested

*BAROKE, Dagmar (Paul Scherrer Institut)*

The Paul Scherrer Institute PSI is funded by tax payers' money. Thus one PR goal is to convince this target group that PSI is worth every Rappen of their respective tax contribution. There are many established ways to do so. But how do you let people know about the great things that take place at your institute if they are not the least bit curious about science and research? Well, perhaps instead they like music: Be it classical, jazz or historic brass military music. Or they like fine dining, or perhaps they are ardent hobby photographers of industrial landscapes. In other words: pick these people up where they are. Organise something that appeals to them and combine the event with presenting your key messages. At PSI we are doing this successfully since a number of years. In this talk I will give some examples.

## Parallel Session 2

Communication to target groups  
(chair: Claus Madsen, ESO)

Fornax Council room  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Engaging with science and other policy makers

*KIRRANE, Declan (ISC, Belgium), BARBOSA, Domingos (IT Portugal), ZATLOUKAL, Kurt (Medical University Graz, Austria), IAN, Jones (Goonhilly Earth Station, UK), VAN ARDENNE, Arnold (ASTRON, Netherlands)*

The session will show how, in addition to media and public outreach activities, there needs to be a strategy in place to support policy maker engagement which is ongoing and addresses, in addition, the regulatory environment which will directly impact on the ability or otherwise of a research infrastructure to do science and deliver benefits. The General Data Protection Regulation (COM (2012)0011) will be the case in point and one where regulators' aims to guard the public's data will have far reach and unintended consequences, in particular with regard to the use of data for science.

Two case studies will be presented:

- Radio Astronomy and SKA Africa;
- Biobanking and Biomolecular Resources Research Infrastructure (BBMRI-ERIC)

In the case of Radio Astronomy, it will be demonstrated how the Written Declaration of the European Parliament on "Science capacity building in Africa: prompting European African radio astronomy partnerships" was achieved and how it contributed to the heightened awareness amongst policy-makers in Europe and elsewhere. It has also led to a permanent forum which addresses the future and ongoing needs of the infrastructure as it develops. The second case, BBMRI-ERIC, will examine how, following the establishment of the ERIC process, it is necessary to engage with policy makers to address the emerging regulatory environment which may adversely impact on the objectives of the infrastructure with regard to health sciences.

### Focus on users: PR for the Committees Research with Synchrotron Radiation, Neutrons and Nuclear Probes and Ion Beams ([www.sni-portal.de](http://www.sni-portal.de))

GRIEWATSCH, Karin (Christian-Albrechts-Universität zu Kiel)

Users of Large Scale Facilities work on other premises than scientists who can do their research in their own laboratory. They need access to facilities and specific instruments. There are several aspects to this – first, the facility has to exist, then the scientist has to submit a proposal for beamtime and last but not least funding is needed for own developments (e.g. sample environments) and for travel. Therefore, to represent their needs, user communities elect committees who hold up the dialogue among users and facilities, representatives of the responsible departments at the BMBF and the project executing organisation. Since a strong user community is also in the interest of the facilities, the German neutron, photon and ion beam facilities fund a common PR project which comprises

mainly the websites of the Committees KFN, KFS and KFSI and of the Helmholtz-programme MML (former PNI). Direct communication with the users by email and the publication of recommendations for research strategy are other fields covered.

The websites of the [www.sni-portal.de](http://www.sni-portal.de) (synchrotron, neutron, ion) published by KFN, KFS and KFSI address mainly the respective users, but also the interested public, students, scientists from fields and decision makers. Besides background information, they offer up-to-date information on the activities of the committees, decisions in research policy, news from the facilities, scientific highlights, job offers and events.

### Engaging Teachers with Large Research Facilities

JOHNSTON, Tania (STFC)

Large facilities can provide pupils with an inspirational context for learning STEM subjects and for seeing those subjects as a springboard for future study, employment and a lifetime of curiosity.

Working with teachers, rather than directly with pupils, to achieve this is highly efficient through the huge multiplier effect, the wider geographic reach achieved and, if done well, through harnessing and developing the expertise of teachers.

Giving teachers access to the laboratories and the scientists and engineers working on current projects, greatly enhances their teaching, giving them relevant ways of linking topical science back to the classroom.

However, it does not come without its challenges. Teachers are typically time-poor but rich in creative

expertise. The development of a successful CPD model hinges on being attuned to the needs of the teachers, striking the perfect balance of talks and demonstrations from the „real“ scientists, with high quality hands-on classroom resources from science education specialists.

Additionally, when aiming to attract teachers from different areas/countries, the different school curriculums must be taken into account, as well as different languages.

In this session, we'll use case studies of successful models of teacher engagement with large facilities to highlight the key aspects which have led to their success, and discuss the methods used to overcome the challenges.

## Parallel Session 2

Communication to target groups  
(chair: Claus Madsen, ESO)

Fornax Council room  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### 10 principles for communicating science in the media

*JOHNSON, Jennifer (Proof Communication)*

*SUTTON, Jim (Proof Communication)*

This talk is about one very large, very important, yet notorious difficult to reach target group: the public. The public crave an understanding of how research applies to the real-world and their everyday lives. Reaching out and generating coverage for this target group is about identifying a story that they will want to hear about. In this session, attendees will learn about the challenges of identifying the right stories and the realities of liaising with multiple institutions, scientists and press officers to generate press coverage that matters.

During this talk, we will:

- Cover how to identify, develop and place a story
- Share 10 principles for communicating science in the media
- Have an open discussion sharing challenges and offering solutions

## Parallel Session 2

Communication to target groups  
(chair: Claus Madsen, ESO)

Fornax Council room  
June 18<sup>th</sup>, 2015 – 16:00-18:00

### Paranal observatory as a showcase of European cooperation

*COMERÓN, Fernando (European Southern Observatory)*

ESO's Paranal Observatory, the flagship of European astronomy, is located in one of the most inhospitable areas of the Atacama desert in Chile. Besides its role in enabling world-class astrophysical research by European scientists, Paranal Observatory offers an excellent success story to raise awareness of the power of cooperation within Europe, and also of Europe with other countries. Paranal is frequently visited by officials, decision makers, and influential personalities of the ESO Member States, of the Host State Chile, and

of many other countries. The observatory location, setup and facilities provide an excellent framework to convey key messages on international cooperation at work, the role of intergovernmental organisations, interaction with industry, outreach, etc., all this customized to the area of interest of the visitors. This talk will present some reflections on the rationale and outcome of visits to Paranal Observatory based on the speaker's experience.

**Round-table discussion: different target audiences requiring different communication strategies**

### Parallel Session 3 – Risk Communication - interactive session

- A risky business to communicate...
- Turning a Science Crisis into a Communication Opportunity
- Interactive session with exercises and role playing

### A risky business to communicate...

*BOSCARO-CLARKE, Isabelle (Head of Communications and Public Engagement), OKADA, Saeko (KEK Japan), MURCOTT, Toby (Keto)*

We propose 2 talks and a panel discussion on communicating risks around high containment virus work to radiation safety through to biological issues. This would involve 2 facilities and a floor discussion chaired by former BBC journalist Toby Murcott.

We propose to share best practice when doing sensitive media relations exploring the role of embargos versus exclusives, identifying and balancing messages to make science interesting and the best ways to measure success. An accident at the Japanese particle accelerator facility J-PARC exposed 30 people to radiation in 2013 and released a small amount of radiation into the atmosphere. Lack of transparency in the laboratory's initial communication led to damaged relations with the local public and journalists. Saeko will discuss the steps her laboratory took to re-build trust and establish transparency, and will provide an

overview of positive media coverage that has resulted from newly established relationships.

Since the start of the operations of the UK's national synchrotron light source, Diamond has continued to grow its capabilities. In 2012, Diamond became the first and only place in Europe where pathogens requiring Containment Level 3 – including serious viruses such as those responsible for Hepatitis – can be analysed at atomic and molecular level using synchrotron light. Isabelle will take the audience through the importance of good planning, names used for the public, visual information, early engagement with local stakeholders as well as excellent science delivered with a vaccine developed for the foot-and-mouth disease virus – a story which reached in media terms a total audience of 298 million worldwide.

### Turning a Science Crisis into a Communication Opportunity

*HILLS, Stephanie (CERN), COSSI, Eleonora (INFN), GILMORE, Jake (STFC), O'CONNOR, Terence (STFC)*

Crisis and controversy have dogged scientific research since its infancy. Whether your area of research is climate change, genomics, or physics, in today's fast-paced news environment all it takes is one blog post to generate a storm of negative attention for your work. But take heart: there are time-tested ways to take that attention and turn it to your advantage. In this workshop, science communicators from physics labs in Europe will discuss three high-profile cri-

ses involving their labs' research. Each will describe their strategy for dealing with the crisis in the short term and the long-term benefit to their researchers from the media attention and relationships that were put into place during the time of crisis. This engaging and interactive workshop will challenge researchers and communicators to examine their prejudices and re-consider the best way of communicating science in 'risky' situations.

### Stakeholder Engagement in Big Science

*WOMERSLEY, John (STFC)*

I will describe STFC's programme of public engagement and stakeholder activities, and how we have developed them over the past few years them as part of an overall strategy to generate a positive attitude and support towards big science projects and investment in major research infrastructures in the United Kingdom.

### Parallel Session 4 – PR of a facility under construction

- SwissFEL – meeting the target groups´ needs
- From dust to a new scientific dawn...
- In-kind Contributions as a Means to Ensure Socio-Economic Return of Large Scale Facilities: The Partner and Industry Campaign of ESS
- Growing interest, keeping momentum, managing expectations: PR challenges of communicating on one of the most fascinating science adventures of the 21st century... soon to be...

### SwissFEL – meeting the target groups´ needs

*GRöSCHL, Martina (Paul Scherrer Institute)*

The Paul Scherrer Institute PSI is constructing a new large-scale research facility – the X-ray laser SwissFEL. It is located in a forest nearby the PSI, which is a habitat for numerous animals and plants. In addition, the local community uses the forest as a recreational space.

This requires a sophisticated communication strategy which considers in first instance the needs of the locals.

In my talk I will focus on how we succeeded in establishing a good relationship with the local community.

As I will show, one of the key points was its involvement at a very early stage of the SwissFEL development, long before the construction of the facility started. A further issue was the communication to different target groups. For, on the one hand, we had to promote the SwissFEL “enthusiastically” to the general public, and, on the other hand, we had to take care of the immediate vicinity. I will present our way to cope with this challenge.

## Parallel Session 4

PR of a facility under construction  
(chair: Lars Christensen, ESO)

Fornax Council room  
June 19<sup>th</sup>, 2015 – 09:30-10:45

### From dust to a new scientific dawn...

*BOSCARO-CLARKE, Isabelle (Head of Communications and Public Engagement)*

Diamond Light Source the UK's national synchrotron light source was set-up as a limited company in 2002 with a handful of staff. It was established as a joint venture limited company funded by the UK Government through the Science and Technology Facilities Council (STFC) and by the Wellcome Trust, owning 86% and 14% of the shares respectively. Construction of the facility started in earnest March 2003 with 1500 piles anchored into the chalk at the foot of an area of outstanding natural beauty. The project was then the largest investment in science for over 30 years and in scale equated to about five football pitches.

This session will start with an overview talk highlighting the good use of milestones, the do's and don'ts, the importance of consistency in messages as well as sharing some of the creative ideas that can be used to engage the public with concrete and steel. The talk will be followed by a live or recorded link discussion bringing together members of the local parish council at the time as well as members of the Oxfordshire Women's Institute who participated in the making of a large scale art piece now on permanent display in Diamond atrium area.

## Parallel Session 4

PR of a facility under construction  
(chair: Lars Christensen, ESO)

Fornax Council room  
June 19<sup>th</sup>, 2015 – 09:30-10:45

### In-kind Contributions as a Means to Ensure Socio-Economic Return of Large Scale Facilities: The Partner and Industry Campaign of ESS

*WEEKS, Allen (The European Spallation Source ESS AB),*

*GUNSENHEIMER, Ute (The European Spallation Source ESS AB)*

The ESS is a partnership of 17 European states committed to collectively building and operating the world's most powerful long-pulse source of neutrons. The construction of ESS is unique in that it is built predominantly through In-kind Contributions (IKC). IKC is advantageous for both ESS and the Partner Countries as it provides access to frontier technology, as well as experience technical and scientific personnel and access to unique production facilities and technologies. This is a very important socio-economic driver as it fuels national innovation potential, competitiveness, and the national GDP of all of the Partner Countries for the long term. To initiate the IKC process, a

campaign was launched with the overall objective of securing the Partner Countries' political and financial commitment to ESS by qualifying the socio-economic return in form of IKC and business opportunities. The campaign consisted of a Call for the Expression of Interest (EOI) to identify potential IKC Partner in the ESS Partner Countries and Partner and Industry Days to raising awareness about ESS and its imminent construction. Beyond that the campaign was supported by a variety of communication and outreach activities, which resulted in the securing of 97.5% of the financial commitments from two host countries and 11 Partner Countries for the construction of ESS.

### **Growing interest, keeping momentum, managing expectations: PR challenges of communicating on one of the most fascinating science adventures of the 21<sup>st</sup> century... soon to be...**

*GARNIER, William (SKA Organisation), ISIDRO, Mathieu (SKA Organisation)*

Constructing an international large scale facility involves a lot of public money, and requires a constant support from funding agencies, the public, and a number of other stakeholders during a long period of time. It is therefore crucial that tax payers understand the scientific/economic/social benefit of this facility, already in early stages of the project. What kind of information to disseminate? Why to promote a facility under (pre-)construction? How is it different from PR activities of an existing facility? Success stories and failures... When and how to address the different target groups? The Square Kilometre Array (SKA) is an international project to build the world's largest radio telescope. With infrastructure on two separate

continents, 20 countries and over 100 organisations involved in its design, and construction set to last over a decade, the SKA is a truly colossal undertaking. The sheer scale of the project and the transformational science it promises to deliver attract lots of attention - and expectations - from the scientific/engineering community, industry, the public, the media and politicians in the countries that are set to benefit from it. But the SKA is still years away from operation. How do you promote a project that is not built yet and manage those high expectations? In this talk we will discuss the challenges and highlight our efforts to engage with these stakeholder groups, explaining why it is important to reach out to them already now.

### **Parallel Session 5a – Best practice**

- NMI3: communication beyond and within the European consortium of neutron and muon facilities
- Engaging the Spanish public about synchrotron light capacities
- Implementing the communication plan in the distributed Research Infrastructure CERIC-ERIC
- Public communication structure enhances scientists' public engagement. A comparative assessment.
- When failure becomes a strong communication opportunity or how to build an authentic brand



### **NMI3: communication beyond and within the European consortium of neutron and muon facilities**

*CRESPO, Ines (FRM II / NMI3)*

NMI3, the Integrated Infrastructure Initiative of Neutron scattering and Muon spectroscopy, is a consortium of the main European neutron and muon facilities, funded through the EU-FP7. A work-package is dedicated to dissemination, which is coordinated by the Information Manager, responsible for promoting the project's activities and results. As most scientists do not contact us about their results, this job demands pro-activeness to look for interesting publications and travel to the facilities to visit the scientists involved to learn about their work within the project. This requires close collaboration with scientists based in different countries and with a network of press officers. The project's current dissemination actions target mainly

scientists and students with the goal to attract users to the techniques employed. Material produced includes press releases, a calendar of relevant events, videos, and presentations at PhD schools and events. Visits to nmi3.eu are monitored by analytics software that inspires us to find ways to increase traffic within the website. We reach out to people outside the project by posting our news on external websites and posting information on our website that could be attractive to a range of researchers. In this session I'd be very interested to hear about other EU projects' dissemination activities, their targeted audiences, the channels they use, and how to emphasise the role of European collaboration.

### **Engaging the Spanish public about synchrotron light capacities**

*MARTINEZ, Ana Belen (Alba Synchrotron), GARCÍA, Gastón (ALBA Synchrotron)*

ALBA is a 3rd generation synchrotron light facility located in Cerdanyola del Vallès (Barcelona) and it is the most important scientific infrastructure ever built in Spain.

The facility is based on a chain of accelerators which produce, accelerate and store in a synchrotron ring electron beams which emit synchrotron light ranging from infrared up to hard X-ray. Its seven operational beamlines, which allow visualization of the atomic structure of matter as well as the study of its properties, are available to academic and industrial users.

The ALBA Synchrotron initiated a communications and outreach programme in 2013 to get in contact

with their different target groups: users, students and general public. The interest in the facility is very high, having more than 6,500 visitors per year (49% of them high school students) thanks to a mix of communications activities: visiting tours, Open Day, courses, etc. The communications and outreach programme also includes out-of-facility activities in order to bring science into society, including the participation of our staff in science festivals, conferences and media presence.

Our aim is to make aware the Spanish population about the cutting-edge research and technology developed in the country, showing the benefits of a science-based economy.

### Implementing the communication plan in the distributed Research Infrastructure CERIC-ERIC

CARBONI, Nicoletta (CERIC-ERIC)

CERIC-ERIC is a distributed Central European Research Infrastructure Consortium set-up as an ERIC by the European Commission. Its mission is to offer an integrated, quality-based open access to a set of complementary facilities operating in nine Central European Countries.

The access is free for the best projects in nano-level analysis and synthesis of materials and biomaterials. By this approach, CERIC (and its Members) intends to stimulate excellent science, technology innovation

and transfer, and services to industry, while supporting interdisciplinary and international training and mobility of researchers, technicians and managers.

The aim of the presentation is that of outlining the setting-up and managing of the Communication activities in a distributed environment, as well as the steps taken to identify the needs of the relevant stakeholders and to address them. Critical aspects and milestones are emphasized, showing the expected results in a multiyear perspective.

### Public communication structure enhances scientists' public engagement. A comparative assessment

LOAIZA ESCUTIA, Claudia (University of the Basque Country),  
SALABERRIA, Kepa (freelance), UMEREZ, Jon (University of the Basque Country)

Internal public relations offices in research institutes play a more important role in the generation and promotion of communication activities with the general public than the motivation of scientists. According to our cross-European empirical study, these offices also have a positive impact on scientists when their motivation to engage in these kinds of activities is low. This study included face-to-face interviews with 112 scientists and 9 national and local public relations and press officers of 5 relevant European centres involved in the field of nanotechnology and materials science, as well as observations of the public communication activities and interactions occurring in the centres. This work is an empirical and exploratory study with a qualitative approach but also using quantitative information to analyse scientists' public engagement ac-

tivity at research institutes. Therefore this study does not offer statistical representativeness. We formulated and tested the following two hypotheses to find the predominant factor that enhances scientists' PE activity.

Hypothesis 1: The amount of scientists' public engagement activity (PE) in research institutions varies mainly in relation with scientists' motivation to public communication of science.

Hypothesis 2: The amount of scientists' public engagement activity (PE) in research institutions varies mainly in relation with the existence of a public communication structure. Our data strongly confirm Hypothesis 2.

## Parallel Session 5a

Best practice  
(chair: Philip King)

Eridanus Auditorium  
June 19<sup>th</sup>, 2015 – 09:30-10:45

### When failure becomes a strong communication opportunity or how to build an authentic brand

*SANDU, Oana (ESO partner)*

Keywords: branding, crisis communication, outreach campaigns  
Summary: Error and trial is a basic approach in science. Yet, in science communication we often tend to project the image of a perfect institution. In doing so we miss the opportunity of building a strong, authentic brand that people can connect with.

This talk will explore the idea that error or the challenges an institution faces can be turned around and used for the benefit of communication. We will try to understand how the young people of today are changing the communication landscape and how we can use understanding them to our advantage.

## Parallel Session 5b

Best practice  
(chair: Philip King)

Eridanus Auditorium  
June 19<sup>th</sup>, 2015 – 11:15-12:30

### Parallel Session 5b – Best practice

- How STFC communicates the impact of its large-scale facilities
- Opening Up access to JRC's European Commission RIs: Experience from DG RTD's Transnational Access funded programs
- Challenges and Opportunities of ESO's Science Communication
- How Did the Higgs Boson Become a Rock Star?

### How STFC communicates the impact of its large-scale facilities

*DOUGAN, Claire (Science and Technology Facilities Council)*

As the operator of several large scale facilities, including neutrons, lasers, synchrotrons, and high performance computing facilities, the Science and Technology Facilities Council has carried out several impact evaluations of these facilities in recent years. But how do we decide how and what to communicate? Claire will present the range of studies that have been carried out on STFC facilities and their associated supporting technologies, and the pros and cons of these approaches.

### Opening Up access to JRC's European Commission RIs: Experience from DG RTD's Transnational Access funded programs

*TAUCER, Fabio Federico (European Commission)*

The Joint Research Centre (JRC) of the European Commission provides evidence-based scientific and technical support for policy making contributing with its research outcome to a healthy and safe environment, secure energy supplies, sustainable mobility and consumer health and safety. The JRC possesses a series of unique research infrastructures that have offered transnational access to researchers in Europe through the Research infrastructures part of the Framework Capacities Programme financed by Directorate-Gen-

eral Research and Innovation. The presentation will focus on the experience gathered by the JRC through these transnational access projects concerning the publicizing of calls for proposals, the production of test reports, publications in Journals, intellectual property and the use and dissemination of the generated experimental data. These activities fall within the plan of the JRC in setting a framework for opening up access to its research infrastructures through excellence- and market-based access modes.

### Challenges and Opportunities of ESO's Science Communication

*LINDBERG CHRISTENSEN, Lars (European Southern Observatory)*

Being a large intergovernmental organisation in a culturally diverse Europe, with the main infrastructures and a Member State in South America, brings interesting challenges and opportunities. This talk will present an overview of ESO's outreach and education, and highlight some selected problems and successes.

### How Did the Higgs Boson Become a Rock Star?

*MARSOLLIER, Arnaud (CERN)*

Most everyone has heard of it and many are aware that it is one of the most important discoveries of the last 50 years, but few people understand anything about the Higgs boson. Indeed, CERN's media profile and visibility considerably increased in the last years with the start of the LHC and the discovery of the Higgs boson announced on 4 July 2012 and the related Nobel Prize awarded to François Englert and Peter

Higgs in 2013. What are the ingredients that triggered such a media hype? How do social media change the landscape? How to capitalize on such visibility? How to work in a global context with involved partners from so many countries? This talk will address some of the challenges and lessons learnt at CERN from this very intense period.

## Parallel Session 6

Using social media for wide spread communication (chair: Paul Piwnicki, PSI)

Fornax Council room  
June 19<sup>th</sup>, 2015 – 11:15-12:30

### Parallel Session 6 – Using social media for wide spread communication

- Juggling acts: how to maintain existing audiences and reach new ones using social media
- New channels, new formats, new content. Stories about the construction of a great new instrument
- The SKA: how to leverage social media for a global project with distributed infrastructure

## Parallel Session 6

Using social media for wide spread communication (chair: Paul Piwnicki, PSI)

Fornax Council room  
June 19<sup>th</sup>, 2015 – 11:15-12:30

### Juggling acts: how to maintain existing audiences and reach new ones using social media

*HOLLAND, Laura (Diamond Light Source),*

*BOSCARO-CLARKE, Isabelle (Head of Communications and Public Engagement), CRUSE, Mary (Diamond Light Source)*

Diamond Light Source has an established and successful twitter presence, with over 4500 followers. Our follower group contains multiple audiences with differing, and at times competing needs and expectations. While targeting can be reasonably straightforward between different platforms, targeting within a platform is more challenging. This session will address the strategies we have employed to ensure that we continue to connect with and maintain relationships with long

standing followers, while reaching out to new groups. We will also discuss methodologies for engaging with three key audience groups – facility users, interested publics, and other research organisations. We will discuss the risks and benefits of using twitter for building networks and relationships, and how we as an organisation have changed our approach as use of social media has grown.

### **New channels, new formats, new content. Stories about the construction of a great new instrument**

*HELMS, Ina (Helmholtz-Zentrum Berlin),*

*ROETGER, Antonia (Helmholtz-Zentrum Berlin)*

Our Research Center is changing fast. We are building new instruments and labs which will yield scientific results only several years later. Classical outreach activities like press releases and News do not cover such “future projects” very well. Thus, we have conceived and set up a new microsite [www.hzbzlog.com](http://www.hzbzlog.com), which was awarded a prize for online communication by Deutsche Presseakademie in 2014. The hzbzlog is like a window into the lab, allowing you a glance over the shoulders of construction engineers and scientists who are planning, building and testing new, huge instruments. This aspect of science is often not visible to outsiders, but it is crucial. Without new instruments,

there is no new science. We will have a closer look at our episodes of a unique High Field Magnet, being set up at the neutron Source BER II: we communicate that science needs many different experts and international collaboration. The [www.HZBzlog.com](http://www.HZBzlog.com) has become a treasure trove for original pictures, interviews and other jewels. We spread them via social media channels (twitter, Facebook and youtube) and feature them in classical print magazines like Lichtblick and Sichtbar. We will discuss in the session about target audiences for such formats and about further evolution of such ideas. Possible Fishbowl discussion: so many channels to serve: Is it worth the energy?

### **The SKA: how to leverage social media for a global project with distributed infrastructure**

*ISIDRO, Mathieu (SKA Organisation), GARNIER, William (SKA Organisation)*

The Square Kilometre Array (SKA) is an international project to build the world’s largest radio telescope. With infrastructure on two separate continents, 20 countries and over 100 organisations involved in its design, the SKA project is a truly global endeavour, involving partners and activities spread around the globe in many countries and many time zones. How do you engage with such different audiences and make the most of social media in the 21st century to promote a global project like the SKA?

In this talk we will present our proactive social media strategy, presenting some of our initiatives and tools to promote theSKA online as well as sharing some of our experience.

### Challenges and goals of outreach and communication of research at large scale infrastructures

*KAYSSER-PYZALLA, Anke-Rita (HZB), HELMS, Ina (HZB), ROETGER, Antonia (HZB)*

Research is a long term investment of a society into its future and funding has to be acquired in a hard competition: not only within the sciences, but as well in competition with other important societal challenges like environmental issues, economic and social problems or international obligations. Communication and outreach are therefore essential. We have to transport not only specific goals of the research planned like innovation or understanding but values as transparency, honesty and responsibility as well. The channels and tools for communication have multiplied these recent

years, from confidential meetings, bilateral and multilateral discussions between science leaders, via all kind of public events and media interactions up to variety of new and rather fluid channels which reach out to very different target groups and are much less under control. A comprehensive, concerted and flexible communication strategy is needed, to serve them all according to their demands in order to maintain a high reputation and increase public and political support for new large scale infrastructure projects.

In Zusammenarbeit mit:

**DIE ZEIT**  
VERLAGSGRUPPE

### Report of Parallel Sessions & Closing



Organized by:



### European Association of National Research Facilities Association, ERF

The ERF-AISBL Association has the not-for-profit purpose to promote the cooperation and the projects between European-level research infrastructures which are open, at international level, to external researchers. These infrastructures include national infrastructures as well as European networks and consortia of research infrastructures.

### Heinz Maier-Leibnitz Zentrum, MLZ

The Heinz-Maier-Leibnitz Zentrum (MLZ) is a leading centre for cutting-edge research with neutrons and positrons. It represents the cooperation between the

Technische Universität München (TUM) and the three research centres of the Helmholtz Association, the Forschungszentrum Jülich, Helmholtz-Zentrum Geestacht and Helmholtz-Zentrum Berlin.

### European Southern Observatory, ESO

ESO is the pre-eminent intergovernmental science and technology organisation in astronomy. It carries out an ambitious programme focused on the design, construction and operation of powerful ground-based observing facilities for astronomy to enable important scientific discoveries. ESO also plays a leading role in promoting and organising cooperation in astronomical research.

- Andrea Voit, Press Officer, FRM II / MLZ
- Angela Wenzik, Scientific journalist, PR, Forschungszentrum Jülich
- Björn Pedersen, FRM II / MLZ
- Claus Madsen, Senior Counsellor for International Relations, ESO
- Christine Kortenbruck, Press Officer, FRM II / MLZ
- Elisabeth Jörg-Müller, Scientific Office, FRM II / MLZ
- Inês Crespo, Information Manager, NMI3 / FRM II / MLZ
- Jürgen Neuhaus, Deputy Director, FRM II / MLZ
- Lars Lindberg Christensen, Head of education and Public Outreach Dep., ESO
- Sara Fletcher, Impact Manager, ISIS / STFC

*Please note that there will be a photographer taking pictures at the event, which will be published on the website.*

**Dear ESO Visitor,**

Welcome to ESO Headquarters in Garching.

This little flyer has been produced to help you to find your way to the offices, laboratories and workshops in the ESO Headquarters buildings which are shown on the map in solid blue. The dashed blue line outlines the planned ESO Supernova – Planetarium & Visitor Centre.

Building E was designed by Fehling+Gogel, a group of architects from Berlin, and inaugurated in 1990. Three subsequent extensions have shaped the building as it is today. Buildings ABC and D (the technical buildings) were designed by Auer+Weber (Munich) and inaugurated in December 2013.

The start of the construction work for the ESO Supernova – Planetarium & Visitor Centre is planned for 2015. The building is being designed by Berhardt + Partner, Darmstadt.

**Building E**

- Entrance (Level 2)
- Council Room | Fornax (Level 1)
- Auditorium | Eridanus (Level 1)
- Sunlight Room | Columba (Level 1)
- Meeting Room 2.01 | Floor (Level 2)
- Meeting Room 2.02 | Sculptor (Level 2)
- Cadente (Level 2)
- Meeting Room 2.01 | Orions (Level 2)

To help you find your way in Building E, please note: There are 6 (B-D) levels, with the entrance at level 2; there are 4 stairwells (I-IV, clockwise); offices are numbered clockwise.

**Building D**

- Meeting Room D.2.24 | Microscopium (Level 2)

**At Your Service:**

- Reception: 9
- Facilities: 6867
- Safety: 6491

**Evacuation Assembly Point**



**Parking**



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**Building ABC**

- Cadente (Level 2)
- Auditorium | Eridanus (Level 1)
- Council Room | Crux (Level 3)
- Meeting Room A.2.01 | Pavo (Level 2)
- Meeting Room A.2.02 | Tucana (Level 2)
- Meeting Room C.3.01 | Centaurus (Level 2)
- Meeting Room C.2.02 | Procyon (Level 2)
- Meeting Room A.3.01 | Dorado (Level 2)
- Meeting Room A.3.04 | Yela (Level 2)
- Meeting Room C.2.01 | Lupus (Level 2)
- Meeting Room C.3.01 | Canis (Level 2)



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