

The Europlanet Prize for Public Engagement with Planetary Science: three years of honouring outstanding achievements

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Abstract

Europlanet has awarded an annual Prize for Public Engagement with Planetary Sciences since 2009, the award ceremony taking place annually at the European Planetary Science Congress (EPSC). The prize has now been awarded three times:

- In 2010 to Dr Jean Lilensten of the Laboratoire de Planétologie de Grenoble for his development and dissemination of his 'planeterrella' experiment;
- In 2011 to the Austrian Space Forum for their coordinated programme of outreach activities, which range from simple classroom presentations to space exhibitions reaching 15 000 visitors;
- In 2012 to Yaël Nazé, for her diverse outreach programme she has individually initiated over the years, carefully tailored to audiences across the spectrum of society, including children, artists and elderly people.

These three prizes all together cover a spectrum of different approaches to outreach and provide inspiration for anyone wishing to become engaged in public engagement, whether at an individual or/and institutional level.

1. Introduction

The Europlanet Prize for Public Engagement with Planetary Science is awarded annually at the European Planetary Science Congress (EPSC). Through the Prize, Europlanet aims to recognise the achievements of outreach providers in planetary

science in Europe and raise the profile of outreach within the scientific community. It is awarded to individuals or groups who have developed innovative practices in planetary science communication and whose efforts have significantly contributed to a wider public engagement with planetary sciences. The Prize was launched at EPSC 2009. Under the FP7 Phase of the Europlanet contract, three prizes will have been awarded. Although this phase will finish in December 2012, Europlanet intends to continue awarding the prize at future EPSC meetings.

1.1 2010 Prize

The inaugural Europlanet prize for excellence with public engagement with planetary science was awarded to Dr Jean Lilensten of the Laboratoire de Planétologie de Grenoble.

For more than 10 years, Dr Lilensten has worked to share the magic of planetary aurorae with school children and members of the public across Europe, using his 'planeterrella' experiment. The planeterrella is inspired by experiments carried out at the turn of the last century by the Norwegian physicist, Kristian Birkeland, who first described how the Northern Lights were caused by the solar wind's interaction with the Earth's magnetic field. In a series of experiments, Birkeland aimed a beam of electrons at a magnetized sphere (terrella) inside a glass vacuum chamber and succeeded in recreating the ethereal glow of the aurora at the sphere's poles.

In 1996, Dr Lilensten visited Terje Brundtland, who was restoring apparatus that Birkeland had used in 1913 for his largest experiment. Following the visit, Dr Lilensten built several terrellas with colleagues and students. From this series of experiments, he envisaged a portable, flexible version that could be used both as a scientific tool and for public engagement.

Dr Lilensten has trained colleagues and students in demonstrating the planeterrella and the Laboratoire de Planétologie de Grenoble hosts approximately two demonstrations per month. The experiment has been shown in exhibitions around France and featured on French and German television. Dr Lilensten has developed a website (<http://planeterrella.obs.ujf-grenoble.fr>) in French and English that describes the experiment, gives information about the aurora and shows images and movies of planeterrella in action. Observatories in Toulouse and Paris now have their own copies of the planeterrella, and another will go on display in the Palais de la Découverte in Paris

later this year. Dr Liliensten is working with groups in the UK, Italy and Switzerland who propose to build their own versions.

1.2 2011 Prize

The 2011 Europlanet prize for excellence in public engagement with planetary science was awarded to the Austrian Space Forum.

The Austrian Space Forum is a national network for aerospace specialists and space enthusiasts. It is a volunteer organisation led by space professionals, focusing on space research including human-robotic Mars exploration. Since 1998, it has developed an outreach programme that targets schools, teachers, the general public and the media. The spectrum of its outreach activities ranges from simple classroom presentations to space exhibitions reaching 15 000 visitors.

The Austrian Space Forum's research activities in the field of Mars exploration are complemented by a strong focus on educational and outreach aspects. The Forum has run schools competitions to design Mars missions and has developed a series of planet-themed outreach kits for audiences ranging from kindergarten to teenagers and adults. The kits include a set of space suits, a Martian landscape and a remote-controlled Mars rover, complete with cameras and a robotic arm. Public events include multimedia shows, often in partnership with science museums, and presences at festivals e.g. Ars Electronica Center Festival, Linz and the Innsbruck Autumn Fair.

The Austrian Space Forum produces regular press fact sheets on planetary science topics and events, as well as updates on its activities via its website, monthly newsletter, Twitter, Facebook and YouTube. In April, the Austrian Space Forum mounted a field campaign to a Mars analogue site in Rio Tinto, Spain, to test the spacesuit simulator, Aouda.X. The campaign was part of PolAres, an interdisciplinary programme of the Austrian Space Forum, in cooperation with international partners, to develop strategies in preparation for future human-robotic exploration of the surface of Mars.

1.3 2012 Prize

The Belgian scientist and writer Yaël Nazé has been awarded the 2012 Europlanet prize for excellence in public engagement with planetary science. While Dr Nazé's research interests at the University of Liège focus on massive stars, she has looked closer to home

– the Solar System – to inspire young and old and share her love of science.

Over the past 15 years, Dr Nazé has carried out a diverse outreach programme carefully tailored to audiences across the spectrum of society, including children, artists and elderly people. She has been particularly active in highlighting the contribution of women to planetary science and showing opportunities for girls looking at careers in astronomy. Following the publication in 2006 of her book 'L'astronomie au féminin', she has given many public lectures and was invited to attend several roundtable discussions and debates.

Dr Nazé, together with a colleague, pioneered a service for journalists giving daily summaries of space news translated into French. She designed a permanent exhibition on the Solar System for the pediatric ward of the Bruyères Hospital in Belgium. She has given more than 100 public talks worldwide on planetary subjects and is a prolific writer of popular science articles. Dr Nazé is also the award-winning author of seven books, including the 'L'astronomie des anciens', which won the Jean Rostand Prize for the best work of popular science in the French language in 2009. She has even written a cookbook inspired by the planets, which includes a recipe for Io pizza.

2. Nominations and special mentions

Over the three years there have been 16 nominations for the prize. The quality of the applications has been so high that the Judges decided to initiate a 'Special Mention' category. This is not a monetary award, but is a formal recognition from the Judges of the value of the work carried out. Projects given a Special Mention are featured as case studies on the Europlanet website.

3. Conclusions

The Europlanet Prize has been a success in shining a spotlight on outreach activities in Europe. Through the presentations at the Opening Ceremonies, the research community has been shown the breadth and value of outstanding outreach activities.