



## Planetaria: news from France.

**J. Liliensten**(1), A. Acker (2), X.Delfosse (1)

(1) IPAG, Grenoble, France (jean.liliensten@obs.ujf-grenoble.fr / Fax: +33 (0)4 76 51 41 49 (2) Observatoire de Strasbourg, France.

### Abstract

France has a good network of planetaria. They are linked through a network called Association of the French Speaking Planetaria. In this talk, I will present this organization and its different activities. I will also report on the making of a Art and Science museum in Grenoble which will include a planetarium. The grand opening is foreseen in 2014. Finally, I will present an astronomical show which has been adapted for planetaria and demonstrate how this benefits both to the show and the planetarium.

### 1. The APLF network.

Planetariums introduce the Universe at the heart of the City. Since 1984, French speaking Planetariums have decided to pool their skills, their diversity, their livelihoods. In collaboration with teachers and professional astronomers, they formed in 1989 the Association of French Speaking Planetariums (APLF) in which they work together, with support from the Ministry of Research and scientific institutions. The headquarters of the APLF is located at the Observatory of Strasbourg (<http://www.aplf-planetariums.info/>). The board of directors meets APLF Planetariums and French astronomers. All French Planetariums receive about 1.35 million visitors per year, about 65% of schools. The APLF has some thirty fixed, 36 mobile teams, 44 schools, plus a dozen French-speaking Planetariums: Brescia (Italy), Brussels and Genk (Belgium), Lafayette ( USA), Lucerne (Switzerland), Montreal (Canada) Tunis, ....

The mission given the APLF is to develop the Planetariums in France and beyond, to deploy scientific knowledge to a wide audience and especially for young people, while working for culture Art and Francophonie. The quality of the performances must be constantly improved, to transmit knowledge effectively updated in "Natural Sciences" of the Earth and the Universe, while contributing to the development of research in France.

In this context, several types of operations are carried out:

- By organizing annual meetings since 1986 through the creation and dissemination of the annual review "Planetarium";
- Through the joint creation of educational materials (booklets, CDs), and production at European planetarium show;
- Through the organization of training (in 1990-91, 1994, 1999, 2003);

### 2. A Future planetarium: Grenoble

One of its main scientific French region, Grenoble and the surrounding Alps, has no such facility. In 2010, a new initiative was presented at EPSC. It is called "the Opera of the Universe" which will include a planetarium and be part of a bigger project : the windmill of Art and Sciences. The concept of the Opera of the Universe includes:

. A building where all the sciences of the universe (geology, seismic, astronomy / planetology, climatology, space weather...) will have the possibility to communicate to the public : rooms for experiences, museum ...

. The scientists serve as experts. As soon as a discovery is made, they explain it to the professionals who will welcome the public so that the results of the research go directly back to the public who pays for it.

. The building will include a 14 m numeric planetarium (about 100 spectators).

. The building will include a meeting room for meetings (200 people)

. The Opera of the universe will serve as legal social centre for local astronomical or geological associations. The professionals will label the selected associations, which will therefore gain recognition.

In the Opera, they will have a room, a copy machine...

We have been working with artists all over the year and came with a very coherent art-science project. We worked on what we are, what we want the public to find in the Windmill of Arts and Sciences, what public we will address... Many questions were answered. I will report on the approach rather than on the actual organization and show how different this approach is from other science museum I am participating too.

### 3. A planetarium theatre show

To reach a new audience, or to offer our audiences more familiar singular form, we worked to present astronomy in an original way through a show where the voices of three astronomers professional mingle with that of a storyteller and the notes of a guitarist. This approach combines art and science and focuses on the human in astronomy, the man in front of the stars, whether scientific or contemplative. How does an astronomer get an idea, how does he live a discovery, what happens during a night out? These are the objects we highlight. In this show, we are mixing the themes: the human behind the scientist, the encounter between music and the accuracy of astronomical texts, travel, printing and wonder of a visitor to Observatoire de Haute Provence. We invite the public to a journey that gave him a taste of what the adventure of research and observation. Born from the meeting of astronomers and artists during the winter of 2009 and the strong ties that developed between them, "People have stars which are not the same" was given at the Festival of Science 2009 and 2010 on the Grenoble region. It has been recently adapted to the dome of the Planetarium de Vaulx en Velin in February 2011 with a special dedicated planetarium show. It was recently granted by the French Society of Astronomy and Astrophysics.

Adapting to a planetarium is a new way to use the dome, to make different public meet each other and discover either the poetry and music or the astronomy.



Figure 1: The show given in a planetarium