

Under the Patronage
of Mr. François HOLLANDE,
President of the French Republic

conference

Thursday 24 and Friday 25 November 2016

Scientific
museology,
quite a story!



deux lieux universcience



at the Palais de la découverte

Thursday 24 November

Political, scientific and cultural projects

1937, 1986: very different times and quite dissimilar perceptions of science-related issues. Now, decades later, we can look back on the goals of the two museums and assess their progress against a background of social change, scientific advances and different public practices.

This first day is structured by a number of 5 to 10-minute interludes presenting archive images and video creations.

09:30 • Opening session

09:45 • Introductory conference

Jacqueline Eidelman, supervisor of the "Musées du XXI^e siècle" (Museums of the 21st Century) mission, French Ministry of Culture and Communication.

INTERLUDE: The birth of the Palais in pictures

10:30 • The emergence of the two museums

The aim of the Palais de la découverte was to show "science being done". The purpose of the Cité des sciences et de l'industrie was to stimulate public interest in social issues related to science and technology. So what main principles governed the creation of these two science museums? From what resources do they benefit?

with **Andrée Bergeron**, science historian, Centre Alexandre-Koyré, CNRS/EHESS/MNHN; **Jean Davallon**, former director of the Culture and Communication Laboratory, University of Avignon et les Pays de Vaucluse; **Réal Jantzen**, former special advisor to the chair of the Cité des sciences et de l'industrie; **Vincenzo Lipardi** from the *Citta della Scienza*, Naples.

INTERLUDE: Birth of the Cité in pictures

On 24 May 1937, as part of the Paris International Exposition programme, the Palais de la découverte opened its doors to welcome crowds of curious visitors come to experience the wonders of science.

On 13 March 1986, as the Giotto probe rendezvoused with Halley's Comet, the Cité des sciences et de l'industrie opened in the Parc de la Villette.

In 2009, the Cité des sciences et de l'industrie and the Palais de la découverte joined forces to form a new cooperative organisation: Universcience. Their shared anniversary – the 30th and 80th respectively – provides an opportunity for Universcience to look back over the progress made by the two museums in promoting scientific, technical and industrial culture, and underline their vital, inventive museology, human-facilitation expertise and high-level cultural engineering.

At the same time, the celebrations offer a possibility to launch a new, dynamic project for the decades to come.

14:00 • Learning is not what it used to be
Since the work of psychologist Jean Piaget, learning theories have evolved, shaped by cognitive science and new digital tools. Can a museum invent new teaching approaches?

with Élisabeth Caillet, lecturer in philosophy and doctor of educational science; Olivier Houdé, professor of development psychology, University of Paris-Descartes; Olivier Las Vergnas, vice-chair for scientific culture and heritage at the University of Lille 1; François Taddei, biologist, director of the Centre for Interdisciplinary Research, Paris.

INTERLUDE: Video nuggets for curious young people

16:00 • Science and Society: I Love You; Neither Do I

Visitors, cultural players, scientists: we are all in turn awed by the miracles behind science and technology, alarmed by some of their impacts on the environment, health and military power, and unsure of how to express informed opinions on these issues. How can a museum throw light on the complex relationships between citizens and knowledge?

with Marie-Françoise Chevallier-Le Guyader, director of the Institute of Higher Studies in Science and Technology; Joëlle Le Marec, lecturer in information and communication sciences at the University of Paris-Sorbonne; Laurence Monnoyer-Smith, former vice-chair of the National Commission of Public Debate, general commissioner for sustainable development;

Dominique Vinck, science sociologist, professor at the University of Lausanne, Laboratory of Digital Cultures and Humanities.

INTERLUDE: Video nuggets for people with questions

18:00 • The role played by scientists

Some have taken part in founding projects and many have contributed to content presented to the public – from exhibitions to videos, conferences and facilitator training. So what are the aims of these scientists? How do they structure their research and their desire to interact with the largest possible number of people?

with Guillaume Lecointre, systematic biologist, Muséum national d'Histoire naturelle; Roland Lehoucq, astrophysicist, French Atomic and Alternative Energy Commission; Jean-Marc Lévy-Leblond, physicist and philosopher, University of Nice Sophia Antipolis; Valérie Masson-Delmotte, climatologist, Pierre-Simon Laplace Institute (subject to confirmation); Yaël Nazé, astronomer, University of Liège; Cédric Villani, mathematician, director of the Henri-Poincaré Institute, Paris.



Friday 25 November

Museum tools: past and future

Once objectives have been determined, what tools does scientific museology develop? The methods of the Palais de la découverte and the Cité des sciences et de l'industrie prioritise "hands-on" exhibits, with human facilitation for the one and automated free access for the other. The emergence of exhibitions with a message, progress in participatory activities and the digital revolution are changing practices. So how are these models evolving?

This second day is structured around theatrical interludes staged by the Théâtre de la Reine Blanche – Paris Stage of Arts and Sciences.

09:30 • Reception

09:45 • "Hands-on" exhibits, from lab to exhibition

Eureka! Pictures and "hands-on" exhibits are often more effective than a long speech, as long as they are used judiciously. We have to know what message we wish to convey, choose the most meaningful hands-on exhibit and employ digital tools without losing sight of reality. A discussion of best practices illustrated by demonstrations.

with Joël Chevrier, physicist, University of Grenoble; Jean-Michel Courty and Édouard Kierlik, physicists, Pierre-et-Marie-Curie University - Paris 6; Éric Lapie, museographer, Universcience.

10:30 • The 30/80 retrospective

Both museums have been innovating ever since they were founded: the Palais with genuine experiments presented in a spectacular way; the Cité with interactive, autonomous museography – not just for adults, but also (a first) for young children. Some of the works presented have had a lasting impact on visitors and enhanced the institutions' reputation. A compilation of innovations illustrated by pictures.

with Astrid Aron and Evanthia Ioannidou, museographers, Universcience; Dominique Botbol, assistant director of exhibitions, Universcience; Diane Chollet, head of the production and layout department, Universcience; Serge Chaumier, museology lecturer and researcher, University of Artois; Marc Girard, director of exhibitions from 1998 to 2015, Universcience; Denis Savoie, director of scientific facilitation and education, Universcience.

INTERLUDE: Extract from *Mileva*, a play by Angelo Corda

14:00 • Scientific popularisation online

Internet technology has enabled exhibitions to be extended to online content. That has led to the creation of "Science Actualités", which is both an exhibition and a website, and its web TV adjunct, universcience.tv. Along with this journalistic approach to science news and documentaries, there are more and more initiatives launched by enthusiasts in the form of new, impressively successful scientific media. Experience-based feedback.

with Alain Labouze, universcience.tv creator, editor in chief of "Science Actualités"; Bruce Benamran, originator of the YouTube channel "e-penser" (e-thinking).

INTERLUDE: Extract from *Fission*, a play by Jacques Treiner and Olivier Treiner



15:00 • How do other science museums go about it?

From the original experiment of the Exploratorium in San Francisco to the digital and poetic creations presented at Casemate in Grenoble or the Science Gallery in Dublin, not forgetting the incorporation of the Espace des sciences (Science Area) within the Champs libres (Free Hands) cultural complex and the very successful renovation of the Muséum de Toulouse in the Botanical Gardens, the world of science centres has evolved continually and the search for new sources of inspiration for further development is unending.

with Michel Cabaret, director of the Rennes Espace des sciences; Laurent Chicoineau, director of the Grenoble Casemate; Francis Duranthon, director of the Toulouse Muséum d'histoire naturelle; Michael John Gorman, former director of the Dublin Science Gallery and founder of the life sciences and natural history museum in Munich; Claire Pillsbury, Program Director at the San Francisco Exploratorium; Jorge Wagensberg, founder of the Barcelona CosmoCaixa; Xiaoming Wang, director-general of the Shanghai museum of science and technology, China.

INTERLUDE: Extract from *Fission*

17:30 • The Cité and the Palais in 2037

Based on the discussions over the last two days, can we imagine what the Palais de la découverte and the Cité des sciences et de l'industrie will be like in 20 years' time?

with Joël de Rosnay, advisor to the Chair's Office at Universcience.

INTERLUDE: Extract from *La chair et l'algorithme (Flesh and the Algorithm)*, a play by Jean Louis Bauer

18:15 • What will the future bring for science museums?

In the digital era, on the basis of the ideas shared over these two days, how will the visitor experience and more generally the relationship between science centres and their public evolve?

avec Bernard Schiele, educational science professor, University of Montreal.