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at http://www.imss.fi.it/museo/modul1.html Ð a fax to 055 2679106. download the schedu may Nou mail, ocopy via e-i g õ pr Sei 

of the world, is the one represented by ancient mapmakers who were able to fly with their imaginations under the guide of special measuring instruments. The workshop offers the possibility to try such instruments to create maps.

## Humanities, Fine Arts and Science Students

#### 3. Galileo and the Copernican System

In 1609 Galileo Galilei perfected a Dutch optical game that enlarged images two to three times. The result - the telescope - allowed him to make sensational astronomical discoveries demolishing the ancient geocentric concept. In the workshop an animator dressed as Galileo reveals such discoveries and validates the Copernican theory.

## Humanities and Science Students

#### 4. Galileo and Mechanics

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nd the Copernican System nd Mechanics of Optics / Again: The Experiences of the Accademia del Cimento

Signature.

All his life Galileo attempted to dismantle the communal concept of the natural motion of bodies as conceived by the 4<sup>th</sup> century B.C.E Greek philosopher Aristotle. In the workshop an animator dressed as Galileo outlines the cognitive processes that form the analysis of free falling bodies. This allowed the great scientist to propose the basis for a new physics valid for both terrestrial and celestial bodies.

## + Humanities and Science Students

#### 5. The Birth of Optics

Although the Ancient Babylonians, Greeks and Romans, had already explored optics, it was not until the end of the Renaissance that lenses and curved mirrors were used to make complex instruments. This interactive workshop outlines the principles and typologies of lenses and mirrors demonstrating the extraordinary effects of their combination allowing 17th Century scientists to discover both the macro and micro cosmos.

## + Humanities and Science Students

## 6.Try and Try Again: The Experiences of the Accademia del Cimento

This workshop outlines the role the Accademia del Cimento played in building upon the scientific heritage of Galileo Galilei and Evangelista Torricelli. From the various areas of the research of the Accademia, the workshop focuses on: meteorology with instruments to measure pressure, humidity and temperature (barometers, thermometers and hygrometers) and astronomical observations that required the construction of more powerful telescopes.

## + Humanities and Science Students

For additional information regarding educational activities in English, please contact: Karen Tomashavsky (IMSS Education Department, English Programming) tel. +39.055.2653163; e.mail tomashavsky@imss.fi.it



## http://www.imss.fi.it

- a complete virtual museum visit •
- in-depth information regarding a few instruments ( the . astrolabi, Galieo's compass and telescope)
- Galileo//thek@ (educational material and research on Galileo Galilei's instruments and discoveries)
- Up-to-date information on activities and initiatives

#### Bookshop

In addition to catalogues (books and DVD) about the Museo di Storia della Scienza, reproductions of instruments for educational purposes are also available.



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## 2006-2007

## **II Museo** di **Storia** della Scienza

**INFORMATION & RESERVATIONS** 055 210866



## Information & Reservations

#### Musei Scientifici Fiorentini tel. 055 210866

Monday, Tuesday and Friday from 9.00 to 13.00 Tuesday and Thursday from 13.00 to 17.00; fax 055 2679106; e-mail: info@museiscientificifiorentini.it 1 September 2006 – 31 May 2007 During the other months, please contact: Karen Tomashavsky (IMSS Education Department, English Programming) tel. +39.055.2653163; e.mail tomashavsky@imss.fi.it

## Museum visits 📾

The Medici and Lorraine collections of scientific instruments, nowadays preserved at the Museo di Storia della Scienza, are among the most important in the world. The astounding instruments collected are both objects of refined craftsmanship and testimony to the material progress of scientific knowledge in the modern age. Upon careful examination of these instruments, we can learn the development of cartography, the diffusion of drawing methods, the perfection of measuring time and space, astronomical discoveries, and the subsequent progresses in mechanics, chemistry and electromagnetism.

## Group visits

For scholastic and group visits, it is **obligatory** to book in advance and the booking is only valid after receiving confirmation from the booking office. This information must be presented at the museum ticket office on the day of the visit.

Groups greater than 25 participants will be divided into two or more distinct groups. A complete visit requires approximately 1 hour and 30 minutes.

#### Costs

€ 3,00 school groups (7-15 years) € 4,00 groups (min. 15 participants) Educators/Chaperones enter free (max 2 per group)



This service is organized in collaboration with Musei Scientifici Fiorentini.

The Guides cost is  $\in$  57,00 in Italian  $\in$  77,00 in other languages and **does not include** museum entrance fee. The payment for the Guide is made to the postal account no. 31542509 and is addressed to Musei Scientifici Fiorentini. Payment for the Guide is to be made prior to the visit and the receipt must specify the name of the school and date of visit. A copy of the receipt must be faxed to 055 2654696 at least 10 days prior to the visit. The guided visit requires approximately 1 hour and 30 minutes.

## Specific experience visits

This partially guided visit allows the participants to receive demonstrations of the functioning antique instruments while being introduced to the rich history of the collections and the evolution of science.

The guided visit requires approximately 1 hour, **includes** museum entrance fee and is available in Italian or English.

Attention: it is possible to book this visit only from September 2006 to February 2007.

Costs

€ 4,00 school groups (7-15 years) € 5,00 groups (min. 15 participants)

Educators/Chaperones enter free (max 2 per group)

Hours

10.00am-11.00am / 11.30am-12.30am / 2.00pm-3.00pm / 3.30pm-4.30pm

Museum visit

Costs

€ 6,50 Full Price Free 0 - 6 years

 $\notin 4.00$  7 - 18 years, senior citizen

- € 3,00 school groups (7-15 years)
- € 4,00 groups (min. 15 participants)
- Educators/Chaperones enter free (max 2 per
- group)

# Educational activities

The interactive workshops focus on developing the varied disciplines of the museum's collections by hands-on activities and demonstrations using replicas of instruments found in the museum's collection: gaining a full understanding of their context and importance. This is followed by an accompanied visit to the rooms in the museum dedicated to the instruments -- reinforcing what was discovered during the workshop and revealing its historical importance.

- All workshops are available in Italian and English; workshops 1 and 2 also in French.
- The workshops require about 1 hour and are followed by a 30 minute accompanied visit in the museum.
- Costs
  - € 4,00 school groups (7-15 years)
    € 5,00 groups (min. 15 participants)
    Educators/Chaperones enter free (max 2 per group)
     A minimum of 10 participants is required or smaller group pay the same cost.
- Hours

9.30am-11.00am / 11.00am-12.30am / 2.30pm-4.00pm

## 1. The Eye of Leonardo: the Science of Art

In keeping with themes explored in the exhibit: Leonardo's Mind (Uffizi Gallery: March 2006 – January 2007) the workshop offers an engaging journey into the techniques and knowledge which, according to Leonardo, made painting the most noble among the sciences. Using interactive models, one can replicate some of Leonardo's optical experiments, in order to discover the workshop's secrets which were behind the special skills of many artists during the Renaissance.

## + Humanities, Fine Arts and Science Students

## 2. The Image of the World: Cartography between Art and Science

The world has two aspects: that which we see around us – a mere appearance – and that which we can only see from above, flying high. This second aspect, showing the true dimensions



## **Opening Hours**

SUMMER (1 June - 30 September) Monday, Wendnesday, Thursday and Friday: 9.30am – 5.00pm; Tuesday and Saturday 9.30am – 1.00pm Evening Openings last Thursday of June and August, first Thursday of July and Spetember: 9.00pm – 11.30pm Closed on Sundays and the following holidays: June 2 and 24, August 15

WINTER (1 October - 31 May) Monday, Wendnesday, Thursday, Friday and Saturday: 9.30am – 5.00pm; Tuesday: 9.30am – 1.00pm Sunday Openings on the second Sunday of each month: 10.00am - 1.00pm Closed all other Sundays and on the following holidays: November 1, December 8, 25 and 26, January 1 and 6, Easter Sunday, Easter Monday, April 25, May 1







## e **Museo** di **Storia** della **Scienza**

Piazza dei Giudici 1 – 50122 Firenze tel 055 265311 – fax 055 2653130 e-mail imss@imss.fi.it internet http://www.imss.fi.it