



## **The *de pinxi* virtual experience @ Susan Mubarak Science Exploration Center - Cairo**

*de pinxi* is launching Human Body Travel, a virtual exploration through human body, for immersive and interactive rooms.

The newest exhibit currently being launched at Susan Mubarak Science Exploration Center (Cairo) is an interactive walk-through the Human Body !

Together with its Egyptian partner Prosylab, *de pinxi* has just released this educational interactive experience for the museum belonging to the Ministry of Education.

Prosylab, a Cairo-based company, leader in system integration for education, is responsible for the set-up and installation of the core infrastructure of the attraction : the Imaginarium, a panoramic immersive room, based on flight simulation technologies (high-end SGI visual computer, and panoramic display system) .

*de pinxi* was in charge of the development of the interactive experience, that enables the audience to discover interactively the inside of the digestive, circulatory and respiratory human systems.

The interactive experience is aimed to schoolmates and families.

### ***Techniques.***

**Argo™** is the software system developed by *de pinxi* to make this interactive adventure possible. The system consists of:

- a software core, **ArgoKernel™**, our real-time engine (similar to the techniques of a flight simulator);
- electronic control units consisting in joysticks ;
- sound system for realist simulation of internal human body sounds !

### ***The experience.***

Reduced to atomic size, the visitors discover for themselves the twists and turns of an educational and internalised journey though the human body : respiratory, blood and digestive systems are explored from inside.

### ***The immersive and interactive room.***

#### ***Immersive.***

The experience takes place in a panoramic room where a system of 3 high-definition video-projectors create a 130° open picture over a diameter of 8 meters ! See layout and pictures of the installation.

#### ***Interactive.***

The show is completely under the control, this is an *interactive* experience! A main operator is provided with joysticks to navigate the virtual experience according to the audience expectations : this is the virtual replica of a guided tour !

The operating is given to the teacher in case of school visits, and to any volunteer in case of large public operating.

de pinxi S.A./N.V. ♦ 54 Avenue Huart Hamoir B-1030 Brussels ♦ phone +32-2 245 75 01 fax +32-2 215 72 06



Furthermore, the interactive theatre can be provided with individual interaction, thanks to our **ArgoGroup™** interaction system. More information about it on our web pages.

#### *Engine.*

Combining interaction and large images immersion is made possible thanks to SGI real-time graphics supercomputers. The Onyx2 IR2 machine powering the show, enables to reach very high display resolutions (in our case 3200 X 1000 pixels), at 60 fps, while offering impressive computing power and 3D-stereography!

The SGI platform enables us to create unrivalled rich and complex virtual worlds matching the requirements of museum we work with. Furthermore, the SGI outstanding antialiasing removes any computer image artefacts from the large displays : no jagged edges, no flickering, perfect rendering of texts, light points and symbols !

#### *Other applications.*

Other titles have been developed or are being developed within the scope of interactive (group) experiences.

The titles listed below are designed for museographic applications; in these cases, the audience is plunged into a virtual guided tour, navigating at will. Each operator has the means to obtain personal information (on the individual display and audio units) about the objects and people encountered during the visit.

#### *Dexia's Virtual Gallery:*

Since its creation over a hundred years ago, the Belgian section of the Dexia Group (Crédit Communal of Belgium) has followed a continuing policy of artistic philanthropy. As a result, this bank has an impressive heritage of contemporary art.

This interactive production by *de pinxi* consisted in reproducing, as faithfully as possible, the bank group's permanent gallery. Some of the works are presented in extremely high resolution, beyond even the capacities of the human eye.

Since its inauguration in 1995, the "Virtual Gallery" has stood as a unique example of using Virtual Reality in the aim of opening a private collection with limited access to a greater number of people!

#### *de pinxi.*

In attachment, you will find a brochure describing our activities since 1991 in the specialised domain of interactive experiences.

For more specific information, please contact us: [info@depinxi.be](mailto:info@depinxi.be)

Visit us : [www.depinxi.be](http://www.depinxi.be)