



# ETH World Lounges Teamwork environments

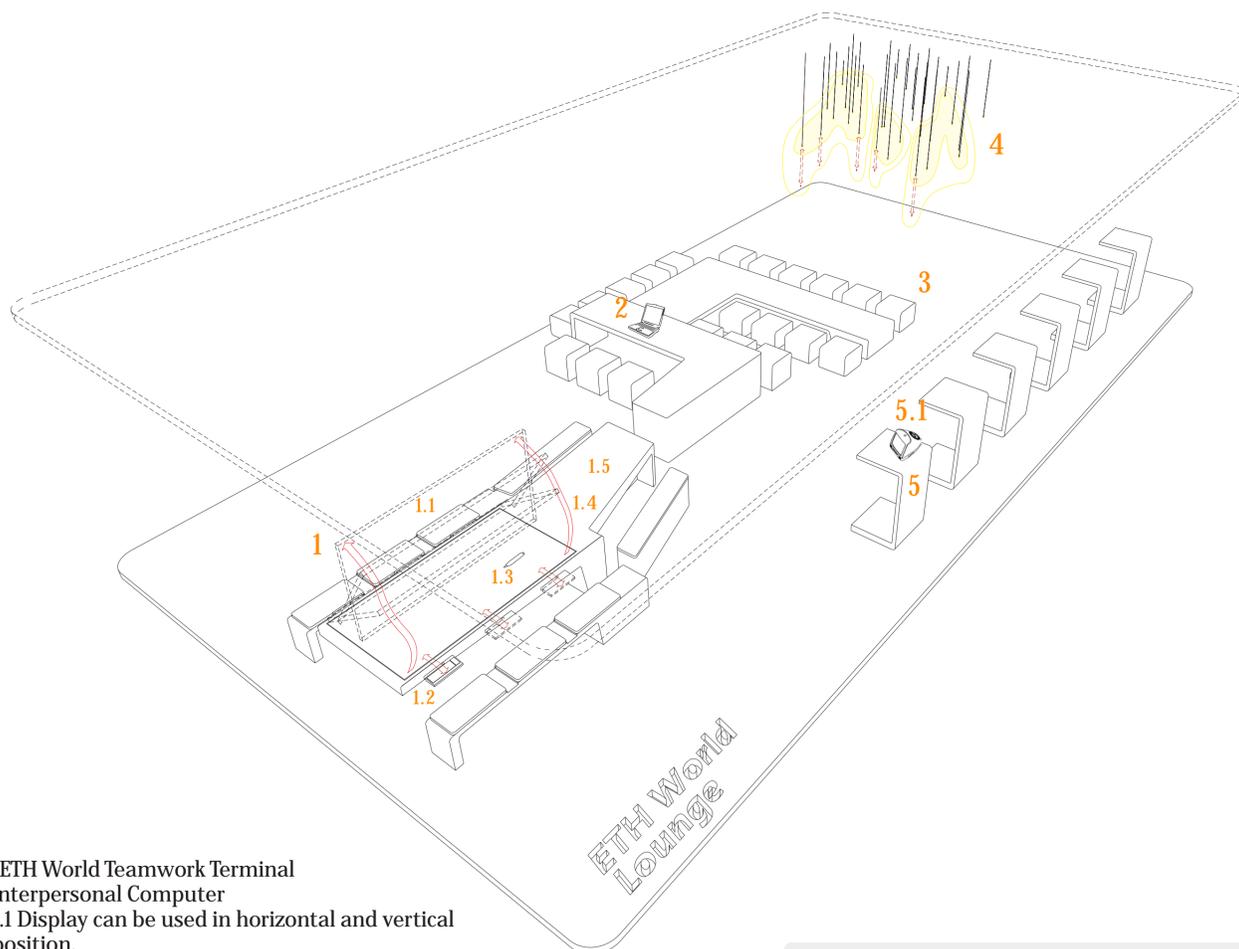
Lounges: Team Work Environments.

Computer work tends to individualise the working routine, limiting teamwork to discussions before, after or while people work on separate terminals. Unlike working in a network of several PC's where each user works in a closed working environment, the ETH World lounge provide the opportunity for real team work with computers. The users share one big desktop display, which combines all user's desktops. The horizontal desktop is connected to a fixed number (6) of integrated terminals which can be increased by login laptops via cable or wireless WLAN.

Of course the terminals allow to browse ETH World and the Internet. Moreover all users of a lounge share a desktop as a common virtual space (as well as the physical one). Herein they have the possibility to share applications and documents, which can be viewed and worked on by all users simultaneously. In horizontal position the system divides the desktop into the six areas for the several users, working documents and windows can be moved and enlarged and shared all over the desktop. Each user can control the mouse, keyboard and on-display light pens over the whole desktop.

For the application were three-dimensional working environments make sense (like chemistry or architecture) the display could be combined with shutter glasses for each terminal so that the desktop becomes a virtual working space.

These lounges are associated to every department. When the desktop is not used as such it will rotate in a vertical position and lift up, then displaying what is happening in the associated virtual section of ETH World. Those shows are automatically driven and would find the sites that have been updated most recently.



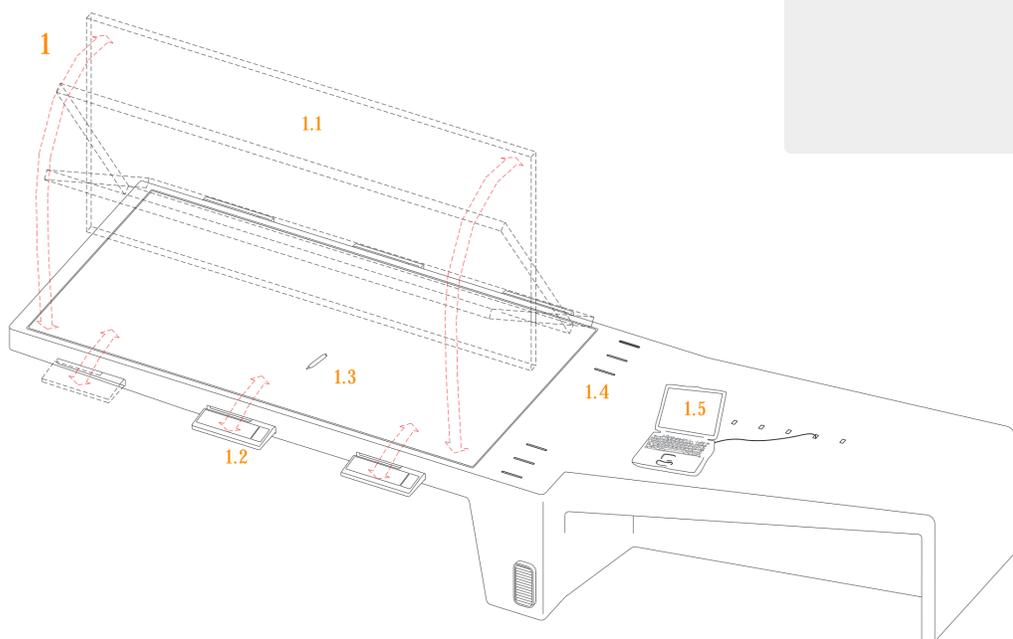
- 1ETH World Teamwork Terminal Interpersonal Computer
- 1.1 Display can be used in horizontal and vertical position.
- 1.2 Keyboards with trackball
- 1.3 On-Desktop Pen (infrared connected)
- 1.4 Media input slots
- 1.5 PlugIn and Workstations for additional Computers.

2 Tables for Workstations and Labtop.

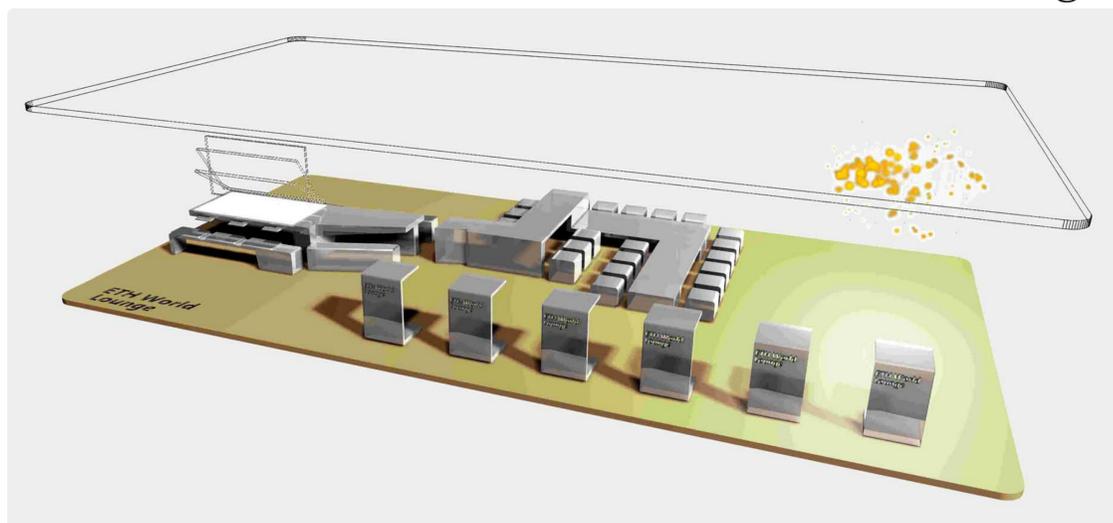
3 Lounge Area for Labtops connected by WLAN.

4 ETH World Lounge Activity Display

5 High Desk for Pop-inETH World Terminals  
5.1 Pop-In Terminal

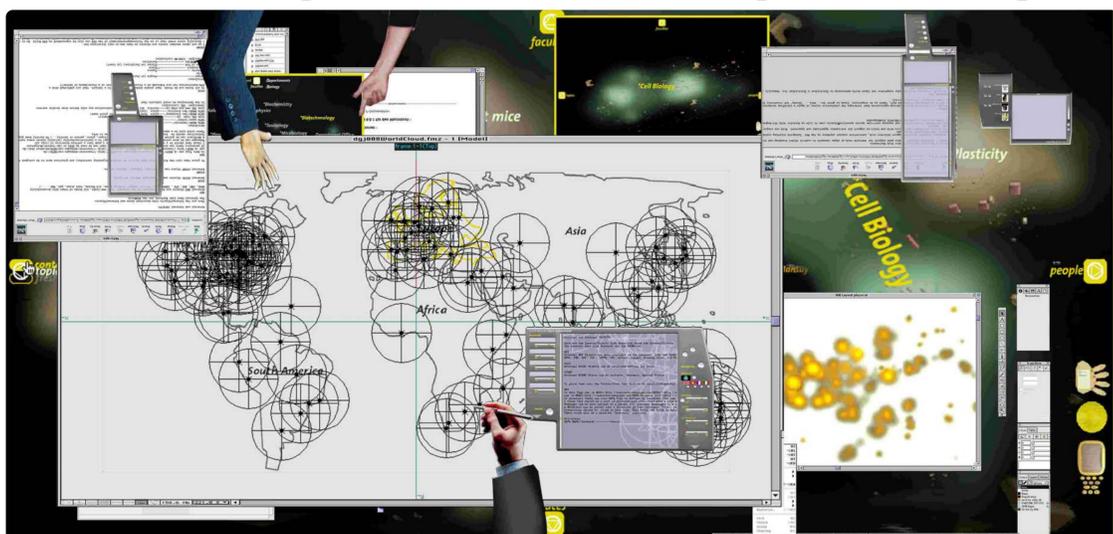


## ETH World Lounges

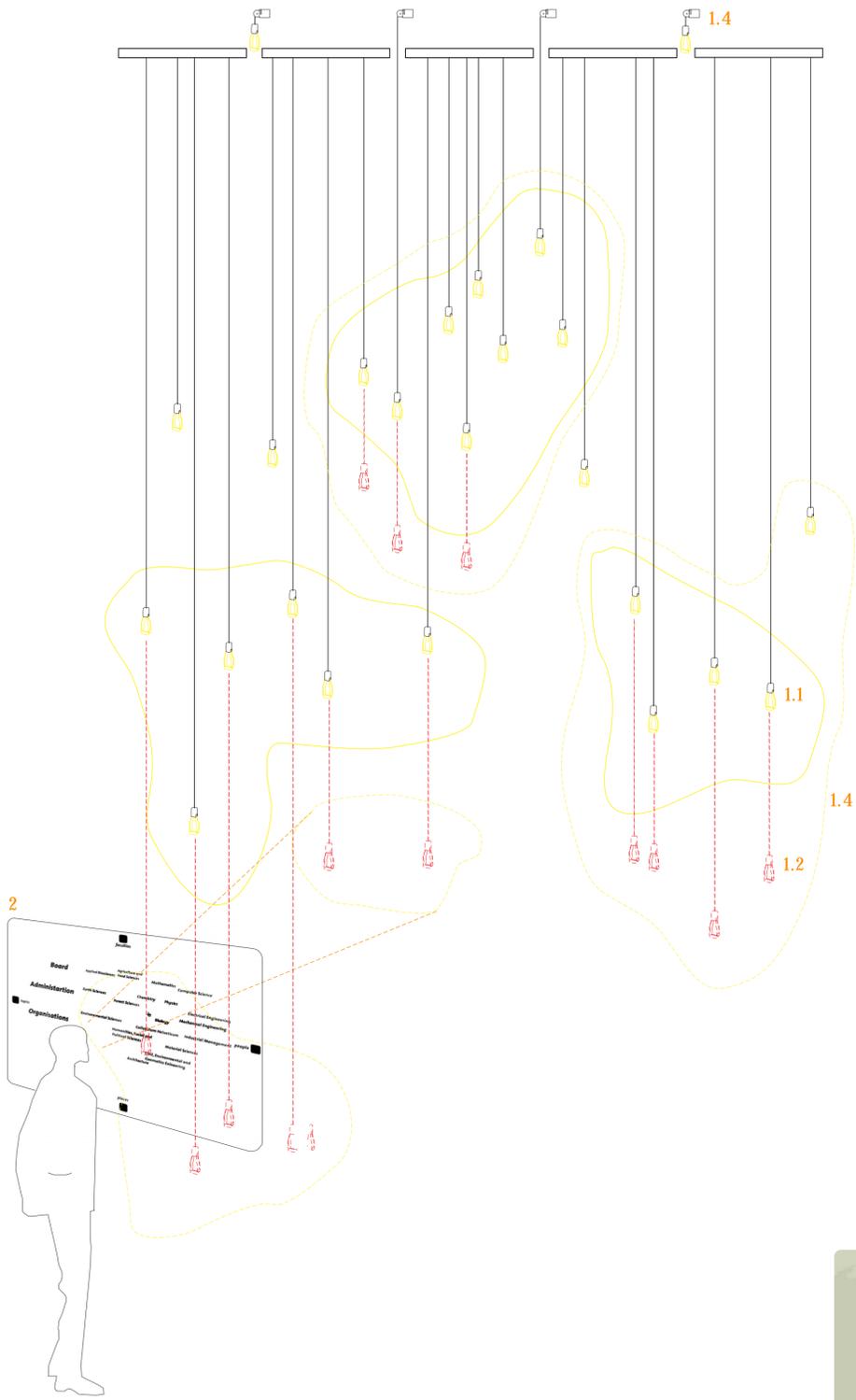


## ETH World Interpersonal Computer

## Desktop of the ETH World Interpersonal Computer



### ETH World activity display see and feel ETH World



### ETH World Activity Display

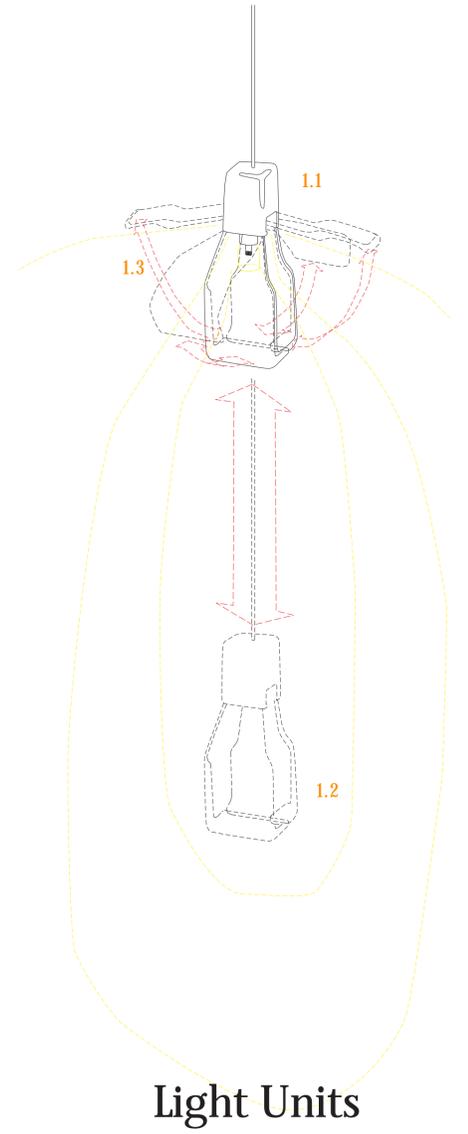
In the Main Building (HG) a spatial electronic installation displays the virtual space of ETH World and the activities in it. It consists of a three-dimensional matrix of mobile light units each light source representing a domain or institution.

The light units will not be associated with a specific domain, but change their position and references as the virtual space of ETH World will change. The matrix will cover the hall's ceiling and as a whole will render a three dimensional model of ETH World in the best possible resolution based on the three-dimensional data, that is generated for viewing the clouds in the virtual space. Therefore the vertical position of every light unit can be adjusted to that three-dimensional model. By changing their vertical position the light units can form a two-dimensional display or disappear into the ceiling when the space is used for other purposes. During the busy day time the lights will be lifted up to keep the walking areas free. The intensity of the light units corresponds to the activity of a domain (updates and hits).

The light units describe light- and in-between-spaces within the hall of the main building. The people moving through the hall can explore them. When the hall is not too crowded the matrix as a whole could be lowered so that people have the opportunity to actually move through those spaces.

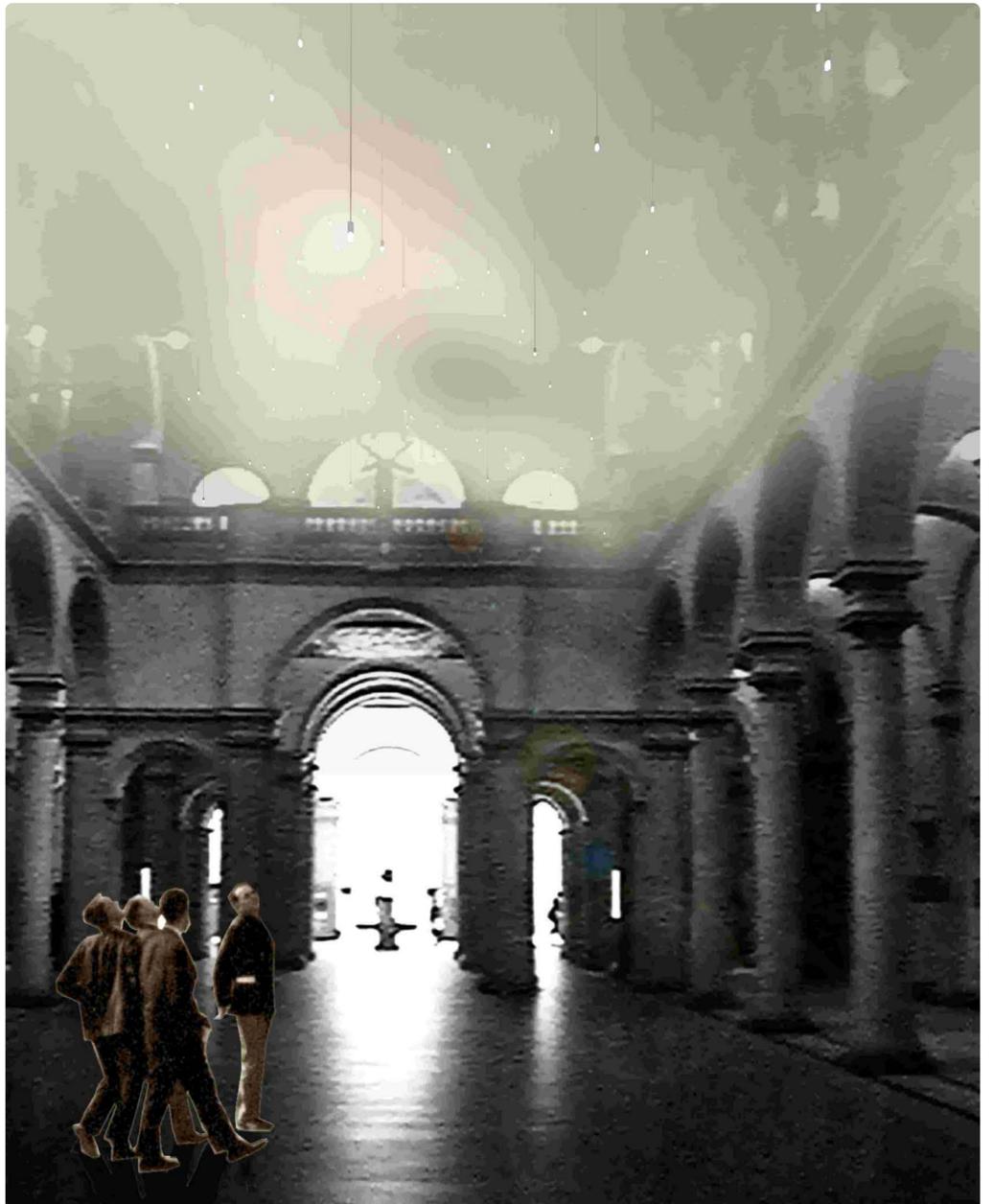
Every light unit consist of a light bulb and a shutter that regulates the emitted light intensity as well as the direction of the light.

A similar activity display could be installed at the Hönggerberg for example in the Physic Auditorium building's foyer.



Light Units

### Installation of the ETH World Activity Display in the Mainbuilding at ETH Zentrum



### ETH World Activity Display

- 1.1 Light Units
- 1.2 can move up and down
- 1.3 open and close
- 1.4 to create and modulate light spaces.

1.5 In the ceiling in which that units can disappear there are mobility units which regulate the vertical position of the units.

2. A transparent screen adds a layer of information (maps and texts) to the light clusters so that they can be related to the equivalent areas in ETH World by viewing the installation through the display.



# ETH World installations Adaptation of spaces and infrastructure

**Lecture Halls.**  
Some lecture halls are fully equipped for an integrated two-way multi media communication. Large screens for projections and an audio system support the lecturer's presentation, which will be prepared and accessed with ETH World integrating different media and sources. The audience will have the opportunity to contribute additional material, questions and examples from their own studies. Therefore each desk for two students is equipped with a display embedded in the desktop and an keyboard. These terminals can be substituted by laptops. The lecturer can decide whether to grant open access to the presentation facilities or to have the contributions preselected before they are displayed.

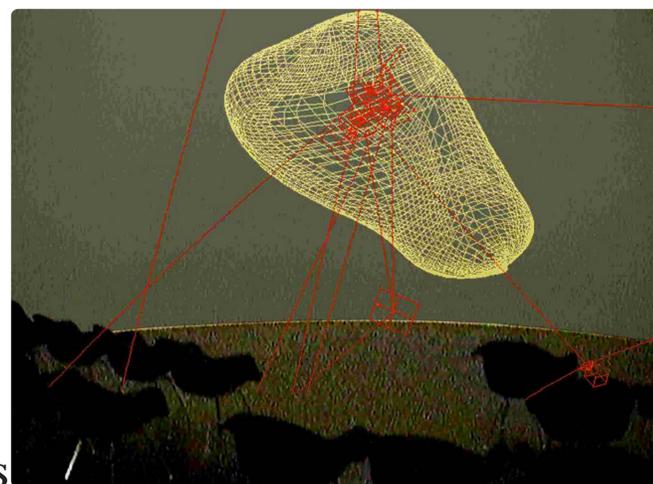
These lecture halls will allow new interactive teaching methods to be established, where examples, references, questions, quotes and other material could be contributed by the lecturer as well as by the student.

**Seminar Rooms and Other Lecture Halls.**  
The smaller seminar rooms do not have to provided terminals for every desk. The lecturer has one terminal to access his presentation and links. Moreover there are plugs (or wireless connections) for every student's laptop. Those will enable them to contribute material.



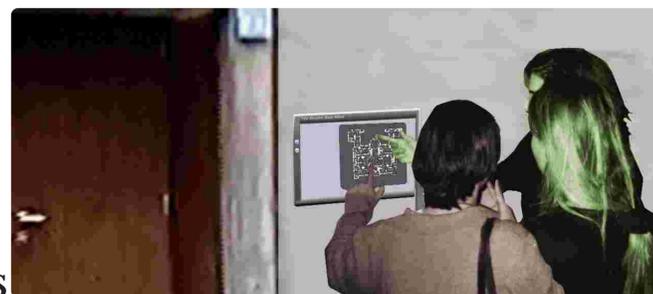
Lecture halls

**Presentation Spaces**  
In specific locations (i.e. the Visdome in the Main Building) multi-media presentation spaces are already installed. The audio and visual systems installed in there will be connected to terminals allowing to access ETH World intranet so that presentations (films, images, text, graphics, sound files) can be prepared and accessed by the lecturer during the presentation. Material from the www and ETH World can be integrated by links. Those spaces would be equipped with microphones for the participation of the audience.



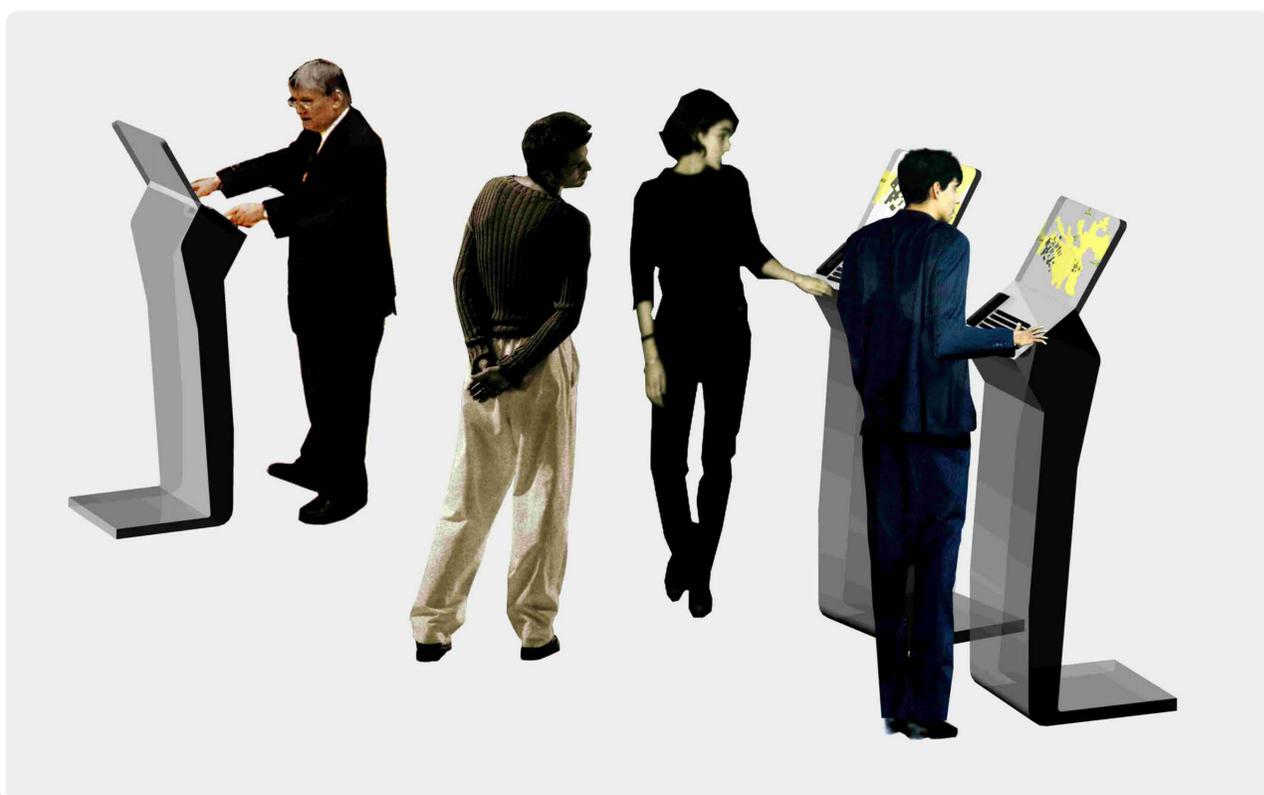
Presentation spaces

**BeeThere: Door Labels**  
Each room's door is equipped with a interactive door label. Their display is connected to the room administration server and shows the bookings of the assigned room over the day. Consisting of a simple monitor and a simplified three button (up, down, enter) input unit, the student could also see the bookings for other days and the location of other courses taking place at the same time.



Bee there Door Labels

**Information Terminals.**  
The information terminals will be mostly used by visitors who might not be familiar with ETH World. Therefore they are based on a very simple and well known hardware consisting of a monitor, a keyboard, and a track-ball to browse ETH World. The browser can be used as a search engine and help to find visitors to find their way around the building in which they are (places-mode) or to find people or institutions they are looking for (people). In addition to the keyboard a telephone receiver allows to call the information desk or internal telephone numbers that can be taken from the ETH telephone book integrated in ETH World.



Information terminals