MatrixView consists of a beam with a mounted cart that includes a pan-tilt camera. The cart’s position and the tilt of the camera can be controlled by a remote video conferencing user. Panning and tilting is computed such as that the focal point is kept constant while moving.

Why?
In systems we use today, the feeling of presence is not very high. Users don’t feel like being present at the other side and today’s VC systems only provide a low level of presence. Our system increases the immersion and the feeling of being there by changing points of view interactively.

Who?
Ramon Hofer
Christoph Ganser
Andreas Kunz

hofer, ganser, kunz}@inspire.ethz.ch

How?
Corresponding remote camera movement

Local left, right and up, down head tracking or GUI control

Camera mounted on a servo system which allows panning and tilting.

The control unit consists of a microprocessor, a USB controller chip and an H-Bridge.

Network

Why?

What?

Extending immersion in video conferencing

Network

Head tracking client

Flash GUI Client