

Nanoworld: The Cooperative Learning Environment on Nanoscience

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Abstract

The swiss virtual campus project "Virtual Nanoscience Laboratory" realises a virtual laboratory for the booming field of Nanoscience. Nanoscience laboratories are expensive and only major companies and organizations sponsored by research programmes can afford their usage. With a concept of distance education complex and sensible experimental equipment can be shared over the internet.

Three main topics are realized in the framework of a virtual laboratory: user management, communication and co-operation, and control of virtual experiments. The basic architecture is based on a multitiered client-server model. Each nanoscience experiment is implemented as stand-alone web-service.

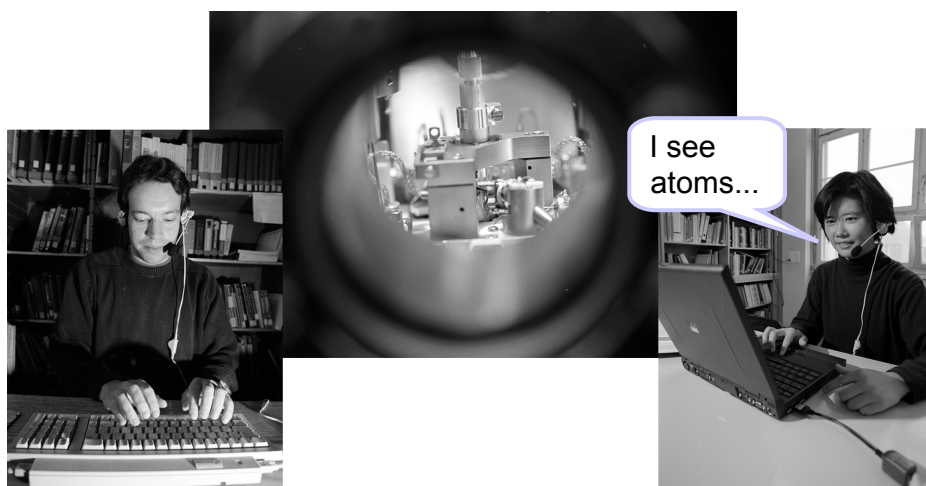


Fig. Two students localized at different places can perform together an experiment in the virtual nanoscience laboratory