

# Researchers Bring Avatars and People Together for Virtual Meetings in Physical Spaces (w/ Video)

October 19 2009

---

(PhysOrg.com) -- While you can't yet teleport or clone yourself to be in two places nearly at once, computer scientists are working on what might be the next best thing.

With support from IBM Research and Nokia Research Center, the VTT Technical Research Centre of Finland created an experimental system that enables people in multiple locations to interact and collaborate with avatars and objects in a single, virtual meeting. Objects and avatars are located in a "virtual" space that mirrors the corresponding physical room.

Sensors, cameras and microphones located on both ends of the conversation allow voices, head and hand gestures and movements to change in concert with the behavior of participants, enabling participants to sense the vital visual cues of body language. In this proof-of-concept, participants in physical rooms wear video see through glasses that depict three-dimensional images of their online counterparts as they stand, walk, talk or demonstrate and manipulate virtual objects shared between the spaces.

The system, called ACME, which stands for Augmented Collaboration in Mixed Environments, was assembled using an [open source](#) viewer from Linden Lab's [Second Life virtual world](#), as well as from open source ARToolkit and OpenCV libraries. The use of open source components lowers the costs associated with the project as it matures,

and encourages the participation of more computer programmers and developers.

The technology provides a more affordable and eco-friendly alternative to physical meetings. It is also more interactive than telephone conferences, video conferences - and even on-screen meetings held exclusively in virtual spaces.

"ACME is a compelling example of the kind of R&D now being conducted that will enable the business community to work more intelligently, in a more productive, efficient, convenient and immersive fashion," said Neil Katz, an IBM Distinguished Engineer in the company's CIO Office, and liaison with the ACME project. "It's easy to imagine that this technology, especially when it becomes somewhat more mature, will give people a promising new option for collaborating more interactively with colleagues in an increasingly decentralized world."

Provided by IBM

Citation: Researchers Bring Avatars and People Together for Virtual Meetings in Physical Spaces (w/ Video) (2009, October 19) retrieved 25 April 2024 from <https://phys.org/news/2009-10-avatars-people-virtual-physical-spaces.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.