

## informatik-Kolloquium

Der Fachbereich Informatik der Johannes Kepler Universität Linz<sup>1</sup> lädt in Zusammenarbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

**Henry Fuchs**  
UNC Chapel Hill

### **Dreams, Illusions and Promise of Telepresence**

*June 18th, 2013, 8:00pm,*  
**Ars Electronica Center**

Deep Space Live (<http://www.aec.at/center/2013/05/28/dsl-dreams-illusions/>)

#### **Abstract:**

Dreams of telepresence – almost teleportation – are fed by special effects in movies, on stage, and even in TV news shows. These illusions may fool some passive viewers, but fail to work for the actual distant participants. Some of these illusions have been exploited for centuries. Why, then is telepresence so difficult to achieve? This talk will explain some of the tricks and illusions, and explain why they work on the stage but not “in the real world”. We will also explain why several promising new technologies, such as Microsoft Kinect and Google Glass, may radically improve the chances for telepresence to work not just “in the real world”, but to become available for the consumer market in the coming decade, enabling most of us to experience daily this age-old dream of being at a far-off place, interacting with distant people, as if we were being there ourselves (<http://video.pbs.org/video/2303503361/>)

#### **About the Speaker:**

Henry Fuchs is the Federico Gil Distinguished Professor at the University of North Carolina at Chapel Hill (USA). He has been active in 3-dimensional computer graphics since the 1970's. His innovative rendering algorithms enabled some of the earliest 3D computer games and medical visualizations. His graphics-specialized hardware designs foreshadowed the specialized graphics chips now used in nearly

<sup>1</sup> Der Fachbereich (<http://informatik.jku.at>) besteht aus folgenden Instituten:

Anwendungsorientierte Wissensverarbeitung (FAW), Bioinformatik, Computational Perception, Computer-Architektur, Computergrafik, Formale Modelle und Verifikation, Informationsverarbeitung und Mikroprozessortechnik (FIM), Integrierte Schaltungen, Pervasive Computing, Systems Engineering and Automation, Systemsoftware, Telekooperation

every personal computer and mobile device. His research group at UNC also pioneered specialized displays for virtual reality and augmented reality, both head-worn devices and also room-sized multi-projector environments. These systems have been used in both training and medical applications. His most recent work has focused on tele-presence, attempting to make long-distance tele-conferencing become more and more like face-to-face interaction in the same room.

Fuchs has been honored with a variety of awards, among them the 1992 Achievement Award from ACM-Siggraph, the world's largest computer graphics society; membership in the National Academy of Engineering (USA) and the American Academy of Arts and Sciences (USA), and the 2013 IEEE-VGTC Virtual Reality Career Award.

Univ.-Prof. Dr. Oliver Bimber  
Institut für Computergrafik

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