On October 31st, the workshop "The future of surgery: wearable Augmented Reality systems" was held at the Conference Centre Le Benedettine in Pisa. The event was organized by our two PhD students, Nadia Cattari (PhD course in Clinical and Translational Science) and Virginia Mamone (PhD course in Information Engineering) and was cofounded by the University of Pisa and the VOSTARS project.

The workshop ran for the whole day and dealt with the industrial perspectives of the VOSTARS surgical platform. During the morning session, international speakers of global relevance lectured, sharing their decades of experience in the field of surgical navigation and applied augmented reality. First, Professor **Richard M. Satava** introduced to the audience the world of computer-assisted surgery, analysing it from a clinical perspective. He particularly focused on the evolution of the surgical navigation systems, virtual and augmented reality and their application in the healthcare sector.

Next, Professor Nassir Navab presented his nearly twenty years of research work in the field of Artificial Intelligence (AI) applied in medicine, stressing out the recent development in multi-modal imaging and the exploitation of the augmented reality paradigm for the guidance of highly precision surgical tasks.

Finally, the engineer Simon Julien from the **Optinvent** company ended the morning session. He provided us with an industrial perspective on the state of the art of the optics technologies employed within the VOSTARS project, pointing out the advantages and constraints of the Optical See-Through systems and their possible implementation in the medical field.

During the afternoon session, the engineer Vincenzo Ferrari, coordinator of the VOSTARS project, spoke about the history of the augmented reality research at the University of Pisa from its origin in 2006 to the present day, evolution which led to the idea behind the VOSTARS project. In closing the workshop, a roundtable moderated by Marina Carbone (scientific manager of the VOSTARS project) was held with surgeons from both within (Giovanni Badiali, maxillofacial surgeon from the University of Bologna) and outside the project (Prof. Satava Paolo Parchi, orthopaedic surgeon and Andrea Giannini, gynaecologist, both from the University of Pisa). The discussion with surgeons of specialities not directly addressed by VOSTARS provided a useful wide-ranging analysis and an objective evaluation on the industrial prospects of the project.

Richard M. Satava, MD FACS, is Professor Emeritus of Surgery at the University of Washington Medical Centre (Seattle). He has served on the White House Office of Science and Technology Policy (OSTP) Committee on Health, Food and Safety. He is on numerous committees of the American College of Surgeons (ACS), is past president of many surgical societies, on the editorial board of numerous surgical and scientific journals, and active in numerous engineering societies. He has been continuously active in surgical education and surgical research, with more than 200 publications and book chapters in diverse areas of advanced surgical technology, including Surgery in the Space Environment, Video and 3-D imaging, Plasma Medicine, Directed Energy Surgery, Telepresence Surgery, Virtual Reality Surgical Simulation, and Objective Assessment of Surgical Competence and Training and the Moral and Ethical Impact of Advanced Technologies.

Nassir Navab research focuses on computer-aided medical procedures and augmented reality. The work involves developing technologies to improve the quality of medical intervention and bridges the gap between medicine and computer science. After studying mathematics and physics, computer engineering and systems control, he did his doctorate at INRIA / Paris XI. He then did two years of postdoctoral research at MIT Media Laboratory in Cambridge, USA. Prior to becoming a full professor at TUM in 2003, he was a distinguished member of the technical staff at Siemens Corporate Research (SCR) in Princeton, USA. In 2006, he became a board member of MICCAI, the organizer of the world's leading conference on medical image computing and computer assisted intervention. He is on the editorial board of many international journals, including IEEE TMI, MedIA and Medical Physics. He has authored hundreds of scientific publications and has filed over 60 international patents.

Optinvent is a world leader in AR display technologies and HMD (head mounted display) devices. Optinvent holds 32 granted international patents and commercializes the award winning "ORA-2" AR smart glasses and the disruptive "Clear-Vu" AR display technology. Optinvent provides smart devices that enable hands free and head up access to augmented reality and contextual information for professionals in the logistics, remote maintenance, remote training, and medical fields. Optinvent is also working with major Aerospace and Defense OEM's to integrate its Clear-Vu technology into next generation pilot's and infantry head mounted displays.