



TRANSFER AND ENTREPRENEUR CENTRE

Project "Kopfphantom"

In surgery, the visualization of 3D structures on the real patient becomes more and more important. This enables, by projection, for example, a better ability to imagine the operating area and adjacent structures. Surgical microscopes working with such a visualization technique are being developed at the Otto-von-Guericke University.

For example, in 2012 and 2013, it collaborated with two university incubators as part of a diploma thesis. The goal was the implementation of a head model based on the visualization technique, with brain, tumor and arterial vascular strain from the datasets of a real patient.

For the final thesis, a spatial representation was printed using rapid prototyping technology on a scale of 1:1. The brain and the tumor were made of a plastic in the PM incubator. The complete contour, i.e. the face of the model, was printed in a plaster ceramic in the iGE.-incubator.