



Distorted Reality: This is how the historic center of the city of Tübingen would look if you were to race down its alleyways at 95 percent of the speed of light. The effects of the theory of special relativity would dramatically change the appearance of the surroundings. An installation is currently making this accessible to human perception: visitors to the Deutsches Museum in Munich, the Deutsches Museum Bonn and the Historical Museum of Bern can experience the phenomenon for themselves through the use of a fitness bike and a projection screen. A computer projects Tübingen's digitalized city center onto the screen. In the virtual alleyways, the speed of light is reduced to a comfortable 30 kilometers per hour, allowing practiced cyclists to easily reach a relativistic tempo. The installation works like a flight simulator and allows almost unrestrained navigation. It was developed by physicists led by Hanns Ruder, professor of theoretical astrophysics at the University of Tübingen. The data for the exceptionally detailed images was provided by Max Planck researchers: a team led by Heinrich Bühlhoff, Director at the Max Planck Institute for Biological Cybernetics in Tübingen, uses it in orientation experiments.

DIAGRAM: U. KRAUS AND M. BORCHERS, PHYSIK IN UNSERER ZEIT 2/2005