



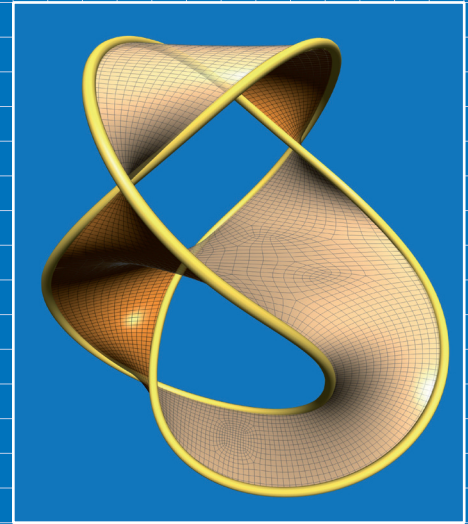
**Berlin
Mathematical
School**

BMS Friday Colloquium

Friday, 4 December 2009, 2:00 pm

Tea before the lecture starts at 1 pm

BMS Loft, Urania
An der Urania 17, 10787 Berlin



Jack van Wijk (TU Eindhoven):

"Knots, Maps, and Tiles: Three Mathematical Visualization Puzzles"

Visualization can help to get insight into mathematical objects, and how to obtain a suitable visualization can be an intriguing puzzle. Three such puzzles are discussed:

- Seifert surfaces are orientable surfaces bounded by mathematical knots. How to construct geometric models of these?
- Mapping the earth is a classic problem. If we allow for interrupts, almost distortion free mappings can be obtained. What are the possibilities here?
- Finally, a regular map is a symmetric tessellation of a closed surface. How to construct a space model of these objects?

All cases are illustrated with many images and animations.

