

Exercise Computer graphics – (till December 7, 2006)

Rotations

Exercise 22: Raytracing panoramic images

In contrast to the example from the lecture we now want to raytrace a 360° panoramic image. Explain what is different to producing a planar projection.

Exercise 23: Intersection ray-tube

We want to extend our raytracer, so that it can also handle tubes. Determine how the intersection ray-tube can be calculated.

To make matters easier you can assume that the tube is oriented in a convenient way in 3D.

Hint:

The tube is bounded by two circles each of which lie on a plane. Calculating within the plane only makes the intersection very easy.