Week 63 (11/24/03)

## Minimal surface

Consider a soap bubble that stretches between two identical circular rings of radius $r$, as shown below. The planes of the rings are parallel, and the distance between them is $2 \ell$. Find the shape of the soap bubble.

What is the largest value of $\ell / r$ for which a stable soap bubble exists? You will have to solve something numerically here.


