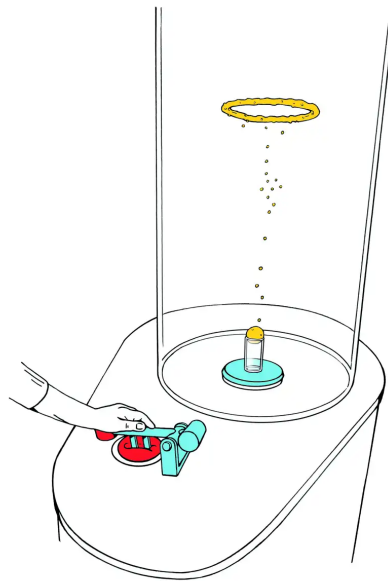


Air rings

Can you make air rings in water?



Push down the lever on the red bellows to press air into the water cylinder .

You can also use your hand pressing directly on the ball.

With a little bit of experimentation you will see wonderful air rings.

Depending on the amount of air you will make round bubbles of different size or larger flattened bubbles – or air rings.

Due to surface tension the spherical shape is the most stable for bubbles.

Small bubbles with 1,5 mm diameter will go straight up. Bubbles with diameters between 1,5 and 6 mm will rise in zigzag patterns („wiggling“), because they create turbulences when rising. Bubbles larger than 2 cm diameter will adopt the shape of a disc, because their drag is lower.

If the air disc is very thin an air ring will develop which is also a stable shape. The ring gets thinner and thinner when it rises and finally breaks apart into bubbles.