How to cook an egg or what physicists are for

> When heating starts there is some noise. This is due to a small overheated layer at the bottom where vapour bubbles collapse (cavitation). Then convection starts and the noise is over.

Hint : keep upper 1/4 of the egg in the air. Avoids "rattling" during boiling phase meaning less broken shells.

#### Outgassing

gas solubility decrases with temperature

### Outgassing nearly finished

Boiling starts Noise starts (cavitation)



## First large vapour bubble rises besides the egg

The right moment to start stopwatch

uncertainity ± 10 sec

## Full boiling

# Exactly 3 min. later, after quenching in cold water

## The perfect breakfast egg, a well polymerized egg-white and the yolk still liquid