Slow motion

ermöglicht durch/made possible by Bürgerstiftung Wolfsburg

What does a bursting balloon look like?



Set up one of the described experiments.

Activate the camera by pressing the red dot at the bottom of the screen.

Let either the metal ball or the die fall through the light barrier to start recording.

Develop your own ideas about actions you would like to see in slow motion. Try them out.

The camera for this experiment can capture short film sequences at a rate of up to 4,000 frames per second and exposure times well below a 1,000th of a second.

For comparison: a standard photo requires about a 100th of a second exposure time. Therefore, the challenge in high-speed photography is the large amount of light that is required. Another challenge is the rapid storage of the amounts of data that are generated when taking 4,000 pictures per second.

High-speed photography allows us to examine very fast phenomena in more detail. Gradual single frame analysis provides a more precise understanding of, for example, crash tests and combustion or breaking processes.