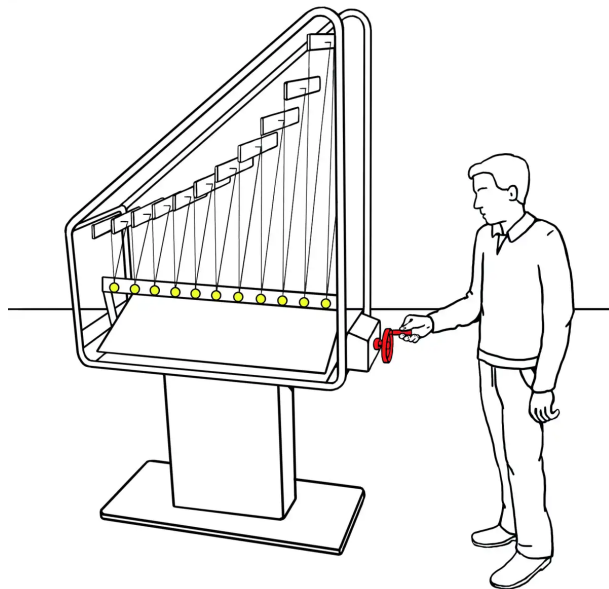


Pendulum wave

How do the oscillation patterns of the pendulums arise?



Turn the handwheel until the pendulums are released and begin to swing.

Observe the swinging balls.

What do you notice when you look along the line of the pendulums?

When the green light is lit, you can try again.

The lengths of the eleven pendulums are adjusted so that the longest pendulum performs ten oscillations over a time of 20 seconds, the next eleven swings, the next twelve, etc. The shortest pendulum performs 20 swings.

Pendulums with different lengths oscillate with different periods. Depending on their oscillation periods and their relationship to each other, surprising patterns of movement result.