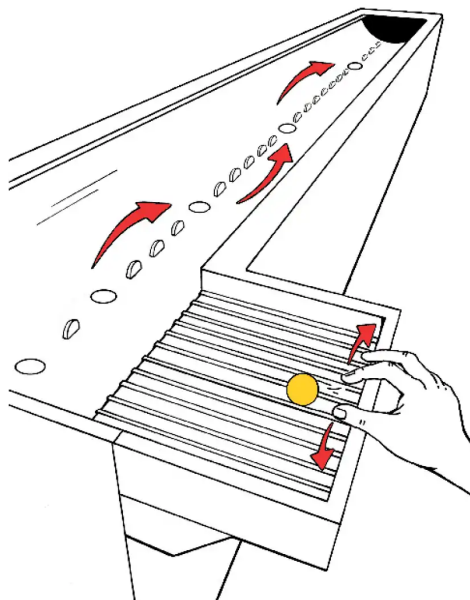


Slalom track

From which starting groove must a ball roll off so that it passes all obstacles?



Put one ball in one of the starting grooves and let go into the big, blue channel.

Do not give the ball a shove.

Try all the different starting grooves one by one.

Which one works best, so that the ball rolls down without hitting an obstacle?

The ball is accelerated in the blue channel in the direction of the inclination. At the same time it oscillates to both sides of the channel ("slalom track").

From the correct starting groove it curves around all obstacles without hitting them. The distances between the voids are getting longer.

The time it takes for the ball to pass through the lowest point of the channel is always the same. During the same time it travels longer distances down the channel.

For uniformly accelerated movements the travelled distance increases quadratically with time.