## OASIS 2

## Cork Marcheschi

## When do which neon tubes light up?



Press and hold the start button.

Watch the sparks arcing across the gap between the metal rods. Which neon tubes ignite with which spark flashover?

The artist Cork Marcheschi uses pairs of metal rods – so-called Jacob's Ladders – to light up the neon tubes.

The Jacob's Ladders are connected in parallel and supplied with around 15,000 volts from a high-voltage source.

As soon as a spark arcs across the gap in a Jacob's Ladder, electricity can flow, and neon tubes can light up. At that moment, no spark flashover occurs anymore at the other pairs of metal rods.

When electricity flows through the rods, a magnetic field is generated around them. This causes them to repel each other and an oscillation is induced.

Through the swaying of the rods, the sparks repeatedly break off, which results in a random switching on and off.