A TABLE TENNIS BALL EXPERIMENT

A table tennis ball refuses to leave a stream of water.

You need:
A foot-long (30cm) thread
Ping-Pong ball
Tape
Faucet

What To Do
Attach one end of the thread to the Ping-Pong ball with a piece of tape.
Turn on a sink faucet and push the ball halfway into the stream as shown.
You would expect the force of the water to knock the ball out of the stream, but it doesn’t! The ball remains fixed inside the stream!

Why does it work?
The water, flowing rapidly over half the ball’s surface, reduces the air pressure on that side of the ball. The higher air pressure on the ball’s other side keeps forcing the ball back into the stream of water.