

Chain Fountain/Mould effect

Key words: chain fountain, Mould effect, self siphoning, mechanics



Equipment List:

1. ~20 metre (18 paces) chain with beads
2. Holder for chain

How to assemble and operate:

- Hold the end of the chain and (while elevating the holder) drop the end to the ground
- The beads will flow out, and then begin to self-siphon. The beads will elevate over the edge of the holder and appear to float
- When finished, replace the beads, ensuring they don't get tangled and that the layering is evenly distributed, so the chain will flow easily the next time

Description/Theory:

This demonstration illustrates forces and is a good way to show a counterintuitive (if not fully understood) phenomenon.

Comments/Notes:

See <https://arxiv.org/abs/1310.4056> for more details on the theory. This demonstration takes ~5 minutes to reset. The beads will levitate higher if you hold the holder higher, so maybe get a tall student to volunteer if need be.