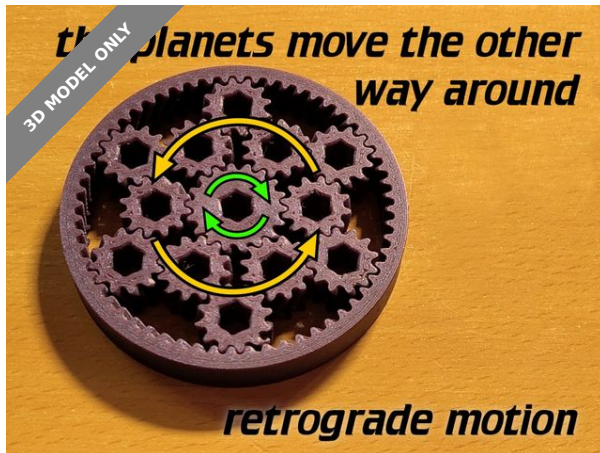




The Counterintuitive Gear fidget



DrJones

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Summary

a print-in-place planetary gear with a double row of planets and counter-rotation (retrograde) motion

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While playing with gear design again, I thought I could add a second row of planets (or are these moons?) to get some interesting behavior:

- If you lock the ring in position and rotate the sun gear, the planets rotate in the other direction around the sun.
- If you hold the sun gear steady and rotate the ring, the planets move in the same direction as the ring, but a bit faster than the ring.

Also try the little **hand crank** (or two) for a bit more fun →

If you liked this one, you might also like **The Counterintuitive Gear MkII** with more and faster planets.

Printing:



0.4mm nozzle, random seam placement, otherwise standard settings.
I also used archimedean chords top&bottom infill.

This is a print-in-place model, no assembly is needed, but a well-tuned printer.

Model files



counterintuitive_gear.stl

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