

Newton's apple didn't fall—it was pushed

Knocking gravity down

Gravity has a problem: no one knows why it works. Newton worked out *how* gravity worked, but he studiously never said *why* it worked. In science lingo one would say gravity has no mechanism, and therefore lacks causality. (In common parlance, one would say that dog don't hunt.)

Consider the common model of gravity and its insurmountable problems. We will close with our favorite, most compelling solution.

The rubber sheet analogy

Einstein came up with a truly fresh way of thinking about the issue. The way he saw it, gravity was not one of the "forces of nature," like electromagnetism or the forces that lash subatomic particles together. Einstein thought of gravity as a kind of curvature of space around masses. In this view, large masses like planets, suns and galaxies are gravity "wells." Other objects roll down into them. Orbiting objects try to fall into their gravity well, but always miss.

This idea is often illustrated using the so-called rubber sheet analogy. Imagine a rubber sheet, stretched taut, which then has a bowling ball placed in the middle. The ball creates a depression or curvature in the sheet, and objects placed on the sheet will roll towards the ball.

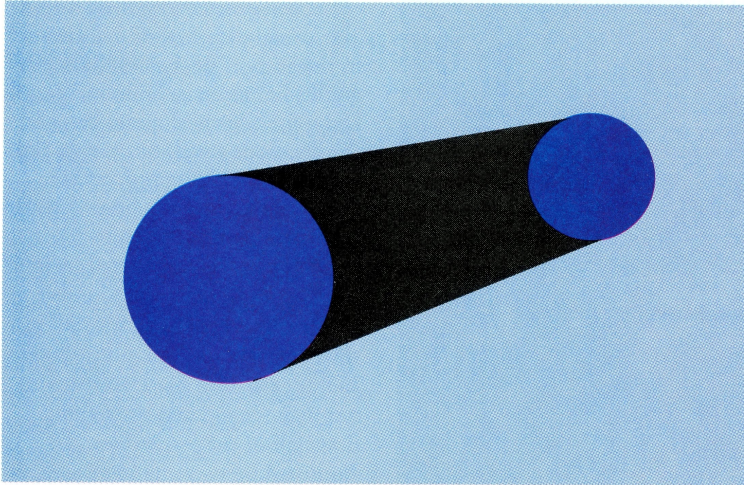
However, the idea that gravity equals curvature cannot be the whole story. The rubber sheet analogy is flawed because in order for objects to start rolling, gravity must still be at work under the sheet. The same objection holds true for Einstein's gravity-as-curvature of space idea: curvature itself exerts no force. Therefore, curvature cannot cause motion. It can only direct the motion of objects that have already received momentum from a force. What force is acting? You still have to explain why the apple falls. Mainstream science is pretty clumsy with the whole concept.

That sucking noise

There must be a force at work besides the curvature of space.

Could the force of gravity be the result of a kind of particle that reaches out and "grabs" other

call gravitons. Somewhat like neutrinos, these gravitons are so small and fast that, most of the time,



Masses in the sea of gravitons "shadow" each other from some graviton collisions, resulting in an apparent attraction.

objects, pulling them down? This concept becomes burdensome. For one thing, you have to postulate a particle that can grab stuff and then find home. And since experiments have shown that gravity acts instantaneously, this particle must travel much faster than the speed of light. Physicists really don't like the particle idea. They prefer the comfort of the rubber sheet, although it really just covers their inadequacies.

Gravity doesn't suck—it blows

There is an alternative idea that turns the existing theory on its head, yet explains everything as good or better than Einstein did. You still have to propose a faster-than-light particle, but that is neither here nor there; it's no worse than what the explanations above must cop to.

The theory, called "pushing gravity," was first floated 300 years ago by Georges-Louis Le Sage, and it is sometimes referred to as "Le Sageian gravity." The modern form of the theory is currently promoted by such alternative science superstars as the rogue astronomers Halton Arp and Tom Van Flandern.

The idea of pushing gravity is that space is filled with a universal flux of faster-than-light particles which for simplicity's sake we will

they pass straight through ordinary matter without touching it or interacting with it in any way.

But large masses do wind up absorbing some gravitons, and in this way provide some shielding. Newton's apple falls because incoming gravitons from below are blocked by the mass of the planet. The apple is struck by more gravitons from above, which push it down onto Newton's head.

In space, objects gravitate towards each other because of the same shielding effect. Essentially, they drift into each other's graviton shadow. As Van Flandern explains in his *Meta Research Bulletin* (vol. 11, no. 4, Dec. 15, 2002): "Any two objects in space shadow each other from some graviton impacts, resulting in a net push toward each other."

Even though objects are pushed together from the outside in this theory, the resulting situation is indistinguishable from, and at harmony with, classic Newtonian physics.

In fact, as Van Flandern points out, "All forces are ultimately pushes...pulling forces...are really pushing forces in disguise (*Meta Research Bulletin* vol. 12, no. 3, September 15, 2003)." Consider the lowly case of pulling a law

2004: The Year of the Gonzo

- The second Gonzo Science rock CD, *Gonzo Science: Conspiracy* is in the works.
- Catch the Gonzo Science film short "Fractals" at the Free Range Film Fest July 30-31.
- In late summer, long lost Gonzo Science brother Allen Richardson moves to Duluth to join brother Jim, making Duluth the official Gonzo Science headquarters.
- Look for Gonzo Science book release events in late summer/early fall.
- Early fall will see the launch of "The Gonzo Science Report," a half-hour live call-in show on PACT TV.
- The Richardson brothers will be major players at Duluth's first UFO convention in late September. Watch this space for details.
- In late October, local dance company Semblesque opens their next show, based on Jim Richardson's rock CD *Gonzo Science*.
- Buy the book *Gonzo Science*, now available at amazon.com, soon at area stores; buy the CD locally or follow the links from gonzoscience.com.

mower up a hill. In reality, you are not pulling the mower. Instead, you are applying a pushing force to the inside of the handle. Cold comfort to all those theorists whose life work will come to nothing as the old theory of a pulling gravity comes crashing down.

Recommended Reading:

- *Pushing Gravity: New Perspectives on Le Sage's Theory of Gravitation*, edited by M. Edwards.
- *Dark Matter, Missing Planets, and New Comets* by Tom Van Flandern.
- www.metaresearch.org 