Einstein wins with fudge
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Predictions from Einstein’s theories that are vague and open to different interpretations are used to fudge Einstein’s success.

Related to what I talked about with moving goalposts [1], there is the method of using fudge.

The term “fudge” meant in the sense: something that is fudged especially: a bending of rules or a compromise. [2]

While by term “fudge factor” is roughly meant: an arbitrary mathematical term inserted into a calculation in order to arrive at an expected solution or to allow for errors especially of underestimation broadly: any arbitrary unspecified factor. [3]

So, bearing this in mind we now look at an article entitled: 5 times Einstein was wrong from Astronomy.com. [4]

Article says: “Recent months have featured a few stories about how Albert Einstein’s theories, or the ideas underpinning them, have all been confirmed to a new degree of accuracy. That’s usually the case: Scientists try to disprove Einstein, and Einstein always wins.”

“But that’s not to say the man was infallible. He was human, just like the rest of us, and did make some mistakes. Here’s a few of them.”

So, the issue will be does Einstein win by using “fudge” to cover up his mistakes. First issue raised is the cosmological constant.

Article says: “When he was crafting his theory of gravity, general relativity, Einstein needed a bit of a fudge factor.”
The article admits straight out that Einstein needed a “fudge factor.”

Article continues: “Everyone back then assumed, based on the information available, that the universe was static, unchanging place, but his equations kept disagreeing. To make them fit the data, he added the factor, which he named the cosmological constant, into the equations.”

The “factor” added – the “fudge factor.”

Article continues: “When he learned, in subsequent decades, that the universe is actually expanding, he supposedly exclaimed “Then away with the cosmological constant!” He famously considered it his biggest blunder.”

So, Einstein used a “fudge factor” to get his maths to agree with the existing expectation of the time that the universe was static, when he it was decided that universe was not static, he thought his fudge was a mistake!

Now, the bits that are arguable:

Some people argue – Einstein didn’t say it was “his biggest blunder”.

Cormac O'Raifeartaigh [5]: “In his memoirs, the émigré Russian scientist George Gamow reported that Einstein once described the cosmological constant as “my biggest blunder.” Some doubt has been cast on Gamow’s claim in recent years; however, we have learnt that other physicists made similar reports.”

Then the evidence that led to thinking the universe was expanding, there are some who still argue against that idea. (But pass on giving reference, although Halton Arp is the most interesting critic of the big bang theory.[6])

Anyway, the most common belief is that Einstein called his “fudge factor” his “biggest blunder”, and that the universe is expanding; whether any of these things might later be overturned in the mainstream. And which is the beliefs the article is going by.

Article continues: “But even Einstein’s mistakes are informative. When astronomers learned, to their astonishment, that the rate of the universe’s expansion was increasing — that galaxies were growing apart faster over time — they called the mysterious force responsible dark energy.”
And of course, “dark energy” is a “fudge factor”, could even be the same “fudge factor” as Einstein’s cosmological constant. It is all just arguable.

The article even points this “fudge factor” out: “And the cosmological constant, as a fudge factor that changes how spacetime interacts with energy, is still a leading contender.”

So, is physics theorising supposed to be about using “fudge” (or “fudge factors”) and that then deemed the way to win (?) Einstein acting his “fudge” of the cosmological constant could deem to be right, and what if they think is a constant is found to actually not be constant, so giving cosmological variable instead of cosmological; or whether accelerating expansion is abandoned replaced by something else, etc. – its just more “fudging” continuing on the process that Einstein started, hence he would be deemed right for “fudging.”

The article then gets onto the second issue of gravitational waves, and says: “Two years ago, scientists announced they had directly detected gravitational waves, literal ripples in the fabric of spacetime. It was a huge validation of Einstein’s work, which had predicted their existence almost exactly 100 years prior. The find also heralded a new era of astronomy, as researchers now have a new way to study the universe.”

People do argue against that, for instance New Scientist 2018 says [7]: “… a group of physicists who have done their own analysis of the data. “We believe that LIGO has failed to make a convincing case for the detection of any gravitational wave event,” says Andrew Jackson, the group’s spokesperson. According to them, the breakthrough was nothing of the sort: it was all an illusion.”

That was in 2018 and things might change; some people will probably always be sceptical of the detection of gravitational waves, just we have to accept that the common belief for now is that gravitational waves exists and were detected.

So, with that in mind, the article continues: “But for a time, Einstein himself doubted they actually existed. In the 1930s, two decades after unveiling general relativity, he was set to publish a paper stating the ripples didn’t exist after all.”

So, here we start with Einstein’s fudging, he first predicts no gravitational waves!
Article continues: “He was eventually persuaded of their existence again, and of course now we know for a fact they exist, having actually seen them.”

So, he is persuaded to change his mind, thus Einstein flips between “doubted they actually existed” to thinking they did, and this “fudge” means a win (?) as it then becomes as what the article said earlier: “It was a huge validation of Einstein’s work, which had predicted their existence almost exactly 100 years prior.” A bit of “fudging” and his prediction they don’t exist can changed to he did predict them; what about the person who persuaded him to change his mind, surely it was really his prediction that gravitational waves exist, not Einstein’s; but the establishment don’t want it written that way and have it as another prediction from Einstein as being confirmed.

Third issue the article gets onto is implications of Einstein’s theories, says: “Many of Einstein’s insights into the universe were the result of his clever thought experiments — he literally revolutionized physics just by thinking hard about it. So he was clearly capable of coming up with big ideas and following them through. And yet, many times in his life, he resisted the weirder implications of his work.”

So, Einstein didn’t accept the full consequences of his theories; sound like he wasn’t taking his theories seriously, so why are we expected to take them seriously (?)

Article continues by saying Einstein was: “One of the pioneers of quantum physics, the unpredictable science of the smallest particles, he never cared for the idea that the universe was, fundamentally, random. “God does not play dice with the universe,” he once said. (The physicist Niels Bohr supposedly responded, “Einstein, stop telling God what to do.”)”

That “God” quote from Einstein is arguable as well, Kelly Dickerson [8] for instance claims it is misinterpreted.

Anyway, the article continues: “Einstein also didn’t care for black holes, a natural consequence of his general relativity, since the rules of physics goes crazy around the singularities at the center of the holes. And while he did believe in another consequence of relativity — that massive objects would warp spacetime enough to act as a kind of lens, redirecting the light from distant sources — he didn’t think we could ever see it. “Of course, there is no hope of observing this phenomenon directly,” he wrote in the abstract of the Science paper introducing gravitational lensing. Wrong.”
“Einstein also didn’t care for blackholes” – meaning sounds like more room for “fudging” – can claim he is right whether blackholes exist or not. Crothers [9] points out problems with blackholes.

Fourth issue is what is deemed minor mistakes by the article: “Lest we believe Einstein’s genius at least precluded him from messing up smaller things (maybe he was more of a details guy?), the evidence again suggests otherwise. From errors in the various proofs of \( E = mc^2 \) to failing to consider seminal experiments, and even just basic mathematical mistakes, Einstein had his share of slipups. No one was more aware of this than the man himself. As he told his gravitational waves collaborator, “‘You don’t need to be so careful … There are incorrect papers under my name too.’”

The “errors in the various proofs…” – i.e. more fudge, with the admission that he has “incorrect papers” is worrying because don’t seem to have a list of those given to us by the establishment.

The last issue is about his family matters and not really relevant to his scientific work, so pass on that.

References

[1] Examples of Relativists (believers in Einstein’s relativity) moving goalposts, Roger Anderton
https://www.gsjournal.net/uploads/research_papers/relativity_theory/research_papers_relativity_theory_science_journal_8314.pdf


https://www.newscientist.com/article/mg24032022-600-exclusive-grave-doubts-over-ligos-discovery-of-gravitational-waves/#ixzz6UXyc7yQI

[8] One of Einstein's most famous quotes is often completely misinterpreted, Kelly Dickerson, Tech Insider Nov 19, 2015, 11:43 PM

https://www.youtube.com/watch?v=jINHHXaPrWA

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