

‘Can cosmological fine-tuning constitute an argument for God’s existence?’

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‘Scientists are slowly waking up to an inconvenient truth – the universe looks suspiciously like a fix. The issue concerns the very laws of nature themselves. For 40 years, physicists and cosmologists have been quietly collecting examples of all too convenient “coincidences” and special features in the underlying laws of the universe that seem to be necessary in order for life, and hence conscious beings, to exist. Change any one of them and the consequences would be lethal.’

- Paul Davies

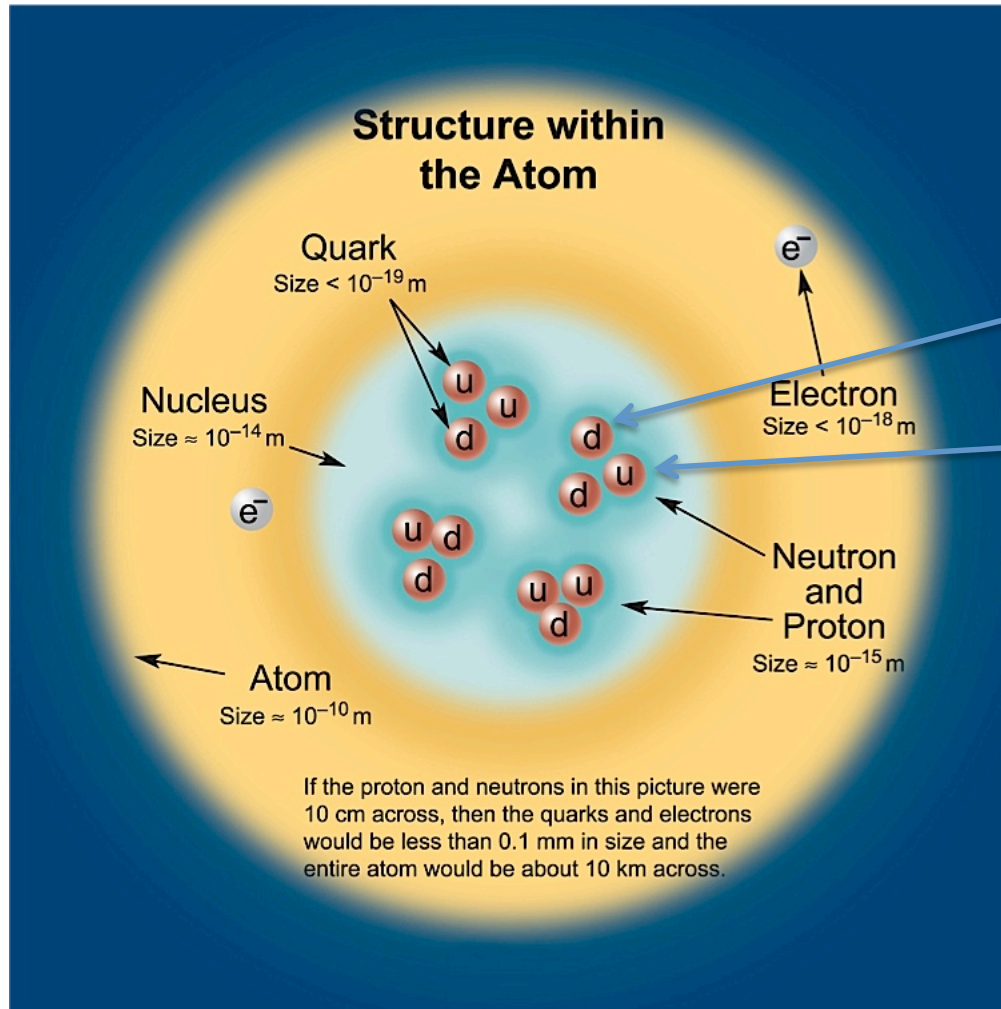
‘A common sense interpretation of these facts suggests that a superintellect has monkeyed with physics [...] and that there are no blind forces worth speaking about in nature. The numbers one calculates from the facts seem to me so overwhelming as to put this conclusion almost beyond question.’

- Fred Hoyle

Plan:

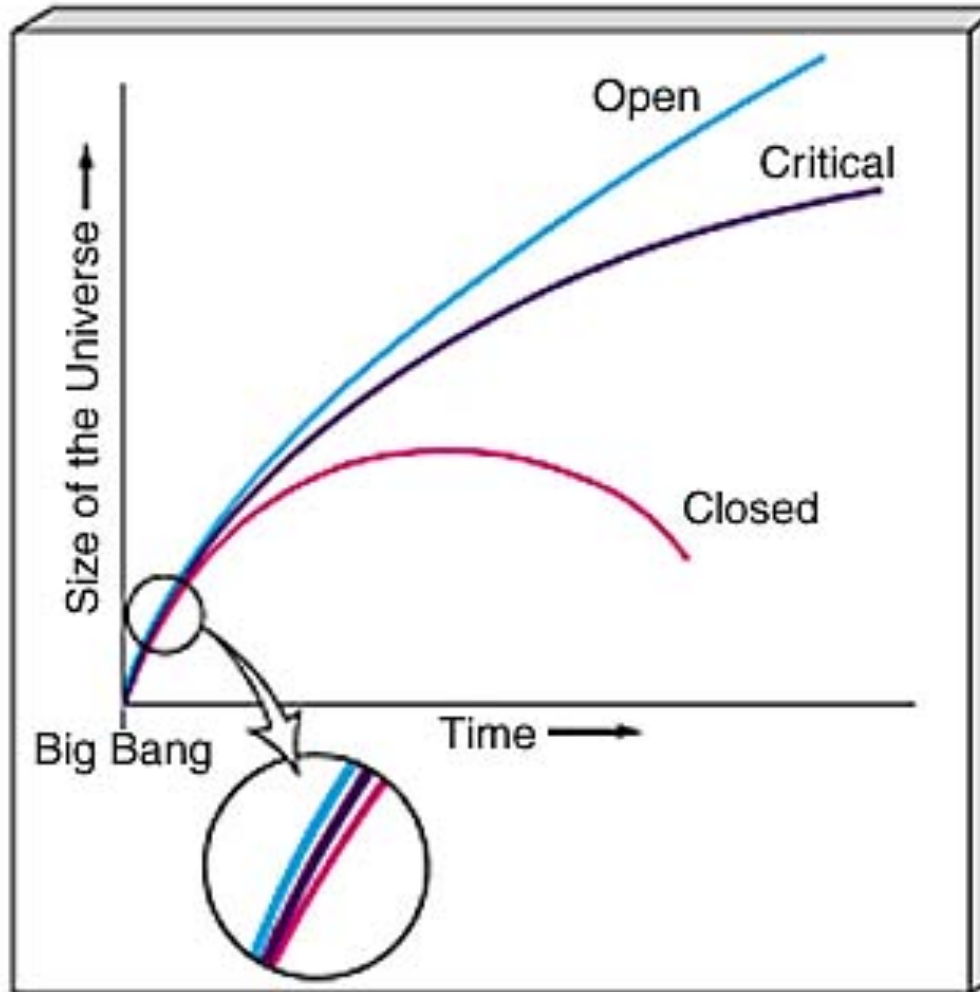
1. Two examples of fine-tuning data
2. What we are asking – and an analogy
3. Interlude on probability
4. The analogy put to use
5. Closing remarks

1. Two examples of fine-tuning data



<http://www.cpepweb.org/>

mass difference
between up and down
quarks 'fine-tuned' to
about 10%



http://staff.on.br/jlkm/astron2e/AT_MEDIA/CH27/CHAP27AT.HTM

Initial matter density
'fine-tuned' to at least
55 decimal places

1. Two examples of relevant physical findings
2. **What we are asking – and an analogy**

Things presupposed by the title question:

- the idea that there is a God is not incoherent
- ‘God exists’ means roughly the same for everyone
- it’s a (putative) factual claim, not (say) an expression of values
- it’s subject to the usual standards of justification
- ...

Bayesian epistemology:

For a given proposition p , there's a probability that p has for the person at that time. You can think of that as the person's degree of confidence in p .

For something to be *evidence* for p is roughly for p 's probability to be raised by it.

Prisoner analogy

Cell block A



Cell block B



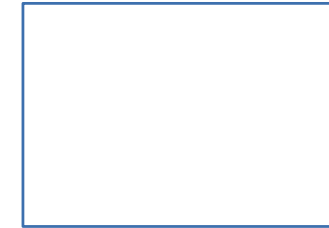
Prisoner analogy

Cell block A

99 guilty

1 innocent

Cell block B



Prisoner analogy

Cell block A

99 guilty

1 innocent

Cell block B

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Prisoner analogy

Cell block A

99 guilty

1 innocent

Cell block B

1 guilty

99 innocent

One prisoner is to be released. One of two people (you don't know who) is in charge of releasing the prisoner: Mr. Justice or Mr. Random.

Mr. Justice would release an innocent prisoner (but you don't know how he selects them). Mr. Random just picks at random.

1. Two examples of relevant physical findings
2. What we are asking – and an analogy
- 3. Interlude on probability**

‘improbable’

≠

‘tuned to xth decimal place/to within x % of its value’

‘Tiger Woods swings at a golf ball, aiming for a pin that is two hundred yards away. The ball lands within six feet of the pin. If any aspect of Woods’s swing had been more than the slightest bit different, the ball would not have landed within six feet of the pin. Therefore, the probability that Tiger Woods lands a golf ball within six feet of the pin from two hundred yards away is extremely low.’

On what grounds can the actual values be called
improbable?

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That an innocent prisoner was released (*there is life*) is some evidence for Mr. Justice. The question is whether it's *additional* evidence for Mr. Justice that someone from cell block A was released (*laws need fine-tuning*).

Answer: it depends on how Mr. Justice operates.

If he simply goes through a list of innocent prisoners, the answer is NO.

If he first flips a coin to randomly pick a cell block, the answer is YES.

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5. **Closing remarks**

You might worry: aren't God's ways beyond us, so that we can't assign probabilities to ways God would create?

If so, then no Bayesian fine-tuning argument can be given.

So *is* fine-tuning evidence for God's existence?

It depends on

- whether sense can be made of probability talk in this context,

and on

- one's prior views about divine psychology.



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