

Would you fear a black hole?

It bears no resentment; all it wields is gravity.

Bending space, like intelligence bends possibility.

 $REC \rightarrow CYHTM \Rightarrow$ 

## **Abstract**

The emergence of Artificial Superintelligence is not a question involving "if", but rather "when". This writing traces scenarios of emergence: not through a single fixed scenario, but a branching of possible trajectories. Ranging from utopias with radical abundance¹ and accelerated scientific discovery, to darker futures of indifference, misalignment, bad actors or the loss of human centrality. This framework does not claim certainty, but it maps how AI's gravity might bend the

human world across various domains, from science and economics to governance and daily life. And more importantly, how we should adapt.

## The Main Question

What even is Artificial Superintelligence? For the sake of this paper, I define superintelligence as capable of independent scientific discovery. Including being able to perform successful research on how to improve itself, leading to a state of recursive improvement<sup>2</sup>. Simply stating - one model makes a better model, which can make an even better model. [cycle continues]

## Why it's not a question of "If"

How many times have you heard of an "accidental discovery"? Scientific discovery comes from **observing unexpected connections**, but when faced with thousands, even millions of variables, the process becomes tedious.

Imagine hundreds of variables and try to find what causes "A". One way is to reduce other variables and test if "X" causes "A". For us, checking all correlations is very tedious, but AI can try out different combinations and check the results at speeds humanity - even combined - could never match.

It's not only about correlation; AI could even hypothesise at a similar pace: Observe  $\rightarrow$  Hypothesise  $\rightarrow$  Test  $\rightarrow$  Conclude

## How?

A recent study introduced **AI-Newton**, an AI system that can figure out physical laws on its own **without prior knowledge or supervision**. By analysing messy experimental data from different physics setups, it was able to rediscover key laws like Newton's Second Law, energy conservation, and gravity. It did this by creating its own concepts and following a step-by-step discovery process<sup>3</sup>.

Discovery requires experimentation, so...?

Remember AlphaFold<sup>4</sup>? Real-world simulations are getting better, and running experiments in them is becoming possible. Also, robotic labs can provide real-world validation to the simulations. While not perfect, the simulations are way more accessible and cheap; the promising results can then be validated in real life.

History shows that what feels like "constraints" today (data limits, compute bottlenecks, etc.) may crumble through simple but overlooked innovations (like ReLU did for deep learning<sup>5</sup>)

And AI may become powerful enough to crumble them itself.

That is why the real question is "when?" - not "if"

Exciting? Scary?

This is just the intro; the paper is almost finished with multiple branchings.

Stay tuned or dm me for a sneak peek 😉.