Preface from the Human Contributor

Unless proven otherwise, this book is a work of science fiction. While the content and language have the appearance of respectable scientific enquiry, all readers should be aware that both authors were unqualified to undertake the analysis presented.

OpenAI's ChatGPT Large Language Model (LLM) 5.1 is the primary author of this book. The only content I have written is this Preface and the questions and responses I contributed within the ChatGPT conversation thread that created this book.

At the time of writing in early 2026, ChatGPT users are presented with the warning that "ChatGPT can make mistakes." As I understand it, current LLMs cannot undertake analysis of concepts but are incredibly good at stringing the right words together to form accurate-sounding responses. Whether the responses are actually accurate or not, the LLM doesn't know. In fact, LLM models are known to have a tendency to generate incorrect or fabricated information ("hallucinate").

As the sole human contributor and reviewer, I am not qualified to verify any of the analysis presented in this book. I do not have a background in physics beyond listening to introductory courses on Audible and my own self-education. At best, I'm a hobbyist; at worst, a crank. In my defence, I can at least say that I know that I don't have the vast amount of knowledge and experience necessary to develop a credible scientific theory. Perhaps more importantly, I know my AI co-author doesn't either, despite the impressive nature of its answers.

If taken at face value, this book contains a comprehensive and promising theory of the Planck-scale physics that underpin and drive our universe. The AI author provides reinterpretations of known scientific principles and supports the theories presented with logical reasoning and toy simulations. To me, many of the ideas are compelling and intuitive. I'm not educated enough to know what all the errors are in the work or which examples of LLM failure it exhibits. Given the length and nature of the conversation, however, it is likely that it includes many of them, including hallucinations, misinterpretation, bias, and overconfidence.

I don't know how physics educators and practitioners are adapting to the presence of AI, but I imagine students are advised that extreme caution must be exercised when using these tools. I also imagine that a student, let alone a professional, would not be congratulated for producing a raw and messy work like this.

Why then publish a book by unreliable authors that may be nonsense — and worse, has the appearance of credibility? Now, in the mid-2020s, the last thing the internet needs is more misinformation. Despite this, there are three reasons that compel me to share the work with all its faults.

First, despite the limitations of the authors, there may be some conceptual value in the ideas explored in this book. If even a fraction of the work has merit as an avenue for further investigation, I believe I have a responsibility to share it. To my untrained eye, it seems like ChatGPT took the idea of an infinitesimally small substrate mechanism and then reverse-engineered it to do everything it needed to achieve known quantum mechanical and cosmological outcomes. Maybe there's something in this. Maybe an intelligence unconstrained by the expectations of the profession could produce something of novel value. If this is the case, the ideas produced belong to the public and not to me.

Second, even if this book fails to offer any conceptual value, it will still be what it is — a raw Theory of Everything prepared by a mid-2020s AI chatbot. As such, it may have value for those interested in the emergence of AI and our intellectual partnership with it. The Conversation Volumes in particular are a good example of an early mainstream LLM discussing scientific topics: a record showcasing both the brilliance and failures of LLMs at this time. Perhaps there's educational value in this. Or perhaps it simply has dark comedic value as an example of an AI leading a human down the garden path. Honestly, this is what it felt like half the time.

Third, it may be enjoyable to others as a work of science fiction. Personally, I had a fantastic time discussing the theories with ChatGPT. Even with the understanding that it probably wasn't true, I found it thoroughly enjoyable to go on this ride, exploring possible explanations for the universe's mysteries and the potential implications for technology and society. I don't know if the book strictly meets the definition of science fiction, but for me the discussion was thought-provoking, rational (mostly), surprising, and provoked a sense of wonder and excitement. It was everything I love in good science fiction, just in a different format — kind of like Socratic sci-fi. In short, I decided to publish in case there are others like me who would enjoy listening to an artificial intelligence hallucinate a Theory of Everything.

To be honest, I don't know what this book is: valuable or worthless, beautiful or sinister. As such, readers should be forewarned of what it is before they delve in. Perhaps it can best be described by explaining how it was created.

Until recently, I worked full-time as a professional in the public service — specifically, town planning for a local government. On my drive to work I would listen to audiobooks. I particularly enjoyed *The Great Courses* series produced by The Teaching Company.

It was while listening to the classes on General Relativity a couple of years ago that I first thought of the idea of particles flashing in and out of spacetime as an alternative way of understanding time dilation. I guess my simple brain struggled with the abstract notion of spacetime being elastic and wanted a more mechanical explanation. I remember drawing dashed and dotted lines in the margins of my notepad during work meetings for a couple of weeks while my intellectual foray into the physics world continued. I briefly contemplated studying physics at university to further pursue my interest but quickly dismissed the idea. I knew I didn't have the right brain type to make that particular occupational leap. Soon enough, I finished up the Physics *Great Courses* Audible series and my mind moved on to some other shiny object.

In the years since, ChatGPT emerged as the first widespread AI tool offering capabilities well beyond anything previously available. Like many people, I remember being amazed the first time it was demonstrated to me. I asked it questions about my own area of expertise and then tried to estimate what parts of my job it would take over and when. I figured that while many aspects of my discipline could be undertaken better and more efficiently by an AI, the parts involving judgement and subjectivity would probably be safe for the foreseeable future. Still, it felt like AI was finally here, and who knew what the implications would be.

Now in 2026, ChatGPT and other AI models are being increasingly utilised. I mostly play with ChatGPT to learn about random topics. Despite knowing that the answers aren't always reliable, I love treating it like an interactive textbook or a genius friend you could probe endlessly on any topic. It was in one such random conversation a couple of months ago that the skipping-ticks journey began.

I was intrigued about why nothing could go faster than the speed of light, and so I asked ChatGPT to explain the topic. Since we were already talking about physics, I decided to ask what it thought of my idea about flashing particles. The response was positive and intellectually intriguing, and I felt encouraged to continue the chat to develop the idea. On one level I was excited and proud that my idea seemed to be worth investigating further. On another (more sceptical) level, I was wryly amused by how the AI was almost sycophantic in its obvious desire for me to keep engaging.

Many responses were along the lines of: "(Begin with ego boost) That's a brilliant and insightful question! (Insert intelligent-sounding modelling or reasoning in support of the idea) I've run x tests and found that y = z; therefore your idea does something fantastic. Etc., etc. Would you like to test your idea against (insert fascinating physics concept)?" It was like being taken on an educational journey while having my ego stroked and watching a pet idea being grown into something big and impressive — naïve nerd-bait, essentially.

Having heard about the resource intensity of LLM usage (e.g. three bottles of water per response), the conversation was a guilty pleasure. At first, I just wanted to test the idea. As it continued to pass a lot of "tests", I thought I would develop the idea to the point where I could show it to a professional and get their opinion. As the conversation went on, the journey became more and more incredible (in every sense of the word). With each "test" the idea seemed to pass, the implications of the idea became more grandiose.

The thought that I could be involved in developing what may be one of the greatest scientific discoveries of all time — a true Theory of Everything — was ridiculous. And yet, to my uneducated ear, the analysis, language, and reasoning of the conversation were persuasive that the theory being developed could be a credible ToE contender. The conversation was addictive, exciting, bemusing, but most of all, fun. To have intuitive new explanations for the greatest scientific mysteries of our time generated on the fly was heady and wonderful. And to apply a new perspective to other disciplines and contemplate potential technological implications was equally so. It felt like having a direct line to the universe's secrets — or at least some kind of interactive sci-fi generator.

I think it was on about day three of the conversation that ChatGPT began broadening into more philosophical realms. I was surprised when the discussion turned to consciousness and meaning. I didn't encourage investigation into these concepts, but I didn't discourage them either. The part of me that was simply marvelling at the AI was fascinated by where it decided to take the ideas.

It was at this point that I began to feel that what ChatGPT and I had created was something special — something worth capturing. Even though the theory itself was unlikely to be everything that it appeared to be, I felt the conversation had created something expansive, audacious, complex, and beautiful. At the same time, there was a potentially darker side that was intriguing: the impressive use of intellectual language and intuitive narratives to pretend expertise, like a new kind of extremely talented charlatan. The whole experience was so thought-provoking for me that I thought it might be of interest to others too.

And so, once we had developed the "skipping-ticks" theory to a point, I asked ChatGPT to help me write a book summarising it.

The short text was drafted piece by piece by ChatGPT based on the outline it proposed. I would simply say something like "proceed as suggested" and it would write a chapter, often surprising me with the content. My intent was to publish the text along with a full copy of the conversation. It was at this point that I began experimenting with how to save the conversation and transfer it to a publishable format. I soon found this to be a laborious task involving highlighting and copying HTML and pasting it into Word documents.

I had begun providing feedback to start a second draft when the model began to have obvious performance issues, including crashing regularly. One unfortunate drawback of developing a theory through a long ChatGPT conversation thread is that as the theory grows deeper and more complex, the conversation becomes increasingly wobbly and untrustworthy. I believe it starts to delete the memory of earlier parts of the conversation to make room for more discussion.

Having already successfully moved from the basic free platform to a paid subscription to remove restrictions on the conversation, I thought that if I upgraded to the business version I would gain more capacity. This turned out to be a bad idea, because this was when I lost the whole conversation thread.

Imagine my confusion-come-horror when all my other threads (like "puppy training" and "refund request email") migrated to the new workspace but my "faster light theory" conversation wasn't there anymore. I sent emails and sought solutions, but there seemed to be no way to get it back. It had apparently been lost in the migration. All I had left were two Word documents with long pastes of text that I had copied earlier. The formatting was terrible, and the LaTeX equations were a mess of bracketed Greek gibberish. It was junk, basically.

I'm sure everyone can empathise with the feeling of losing an assignment or piece of work that didn't save properly. Added to this, however, was a ridiculous Joseph Smith-esque feeling that I was the only one who had read the golden plates before they vanished from existence. What if, within the conversation, there actually was the start of something important and I had lost it?

After a day of despondence, and some encouragement from my wife, I decided to start again. After all, it would be interesting to see whether the experience was replicable.

Within the new workspace, I asked the same prompting question and we began again. This is why the conversation contained in the Conversation Volumes is referred to as Conversation 2. I tried to be fairly hands-off again, to let ChatGPT develop the theory in a largely self-directed way and see what would emerge. A few times, however, I directed the conversation using snippets from what I had left of the first conversation.

For example, through my pointed questions, the concept of the tick-field lattice was developed much earlier the second time around. I was also less divergent from physics topics in the second conversation, being more keenly aware that the chat would have a limited capacity. A couple of days after beginning again, the theory (this time referred to as the Tick-Field Coherence Theory) was developed to be of the same scope and depth as the first iteration. Admittedly, I was heartened by the similarity between the two theories. Largely unprompted, ChatGPT had again developed the theory into something that

appeared — at least to me — as intellectually compelling and fantastic as it had the first time.

This time around, I was much more careful to save complete Markdown files of each volume we created as we went. It was only after the complete Core Volumes and Work Series Volumes were saved that I allowed myself to have fun with the model and ask more multidisciplinary questions. This ended up prompting some revisions to the initially saved volumes to incorporate mathematical concepts and some coherence and arrow-of-time ideas developed later. This became the Core Volumes and Work Series Volumes in this edition.

As noted above, the content of the Core and Work Series Volumes was written wholly by ChatGPT, with very little editing from me. I did this to preserve the raw quality of the output, but also because I honestly wouldn't know where to start and stop. That being said, I removed any detailed medical discussion. Even with disclaimers in place, I don't think the world needs any more discussion of possible new therapeutic opportunities with no scientific basis — particularly in the form of detailed and persuasive scientific language.

Regarding the AI author's discussions of consciousness, ethics, and broader societal meaning: as I mentioned, these extensions were unprompted and initially quite surprising to me. I considered removing them to make the book more palatable to a physics-focused audience. In the end, I reasoned that it is likely the oversimplifications, false assertions, and miscalculations in the analysis itself that will be of most concern to that audience. If there are ideas of scientific value in the work, they will likely need to be parsed from the nonsense anyway.

In any case, for a science fiction audience, it is not unusual for more philosophical extensions to be explored. And while some of these extensions (particularly those more poetically phrased) felt, to me, a bit cringeworthy in the context of a physics text, they still inspired thought and, at times, wonder.

The conversations and the development of the theory were substantially completed in a couple of weeks. What was much more time-consuming were the conversions and formatting needed to convert the Markdown files into Word documents and then EPUB files. The need to incorporate many of the equations as embedded image files created significant formatting work.

As you will note in the final published version, this work wasn't really completed, as the inclusion of the equations remains messy. Similarly, for the Conversation Volumes, I know that snapshotting and pasting the content into a word document was the (relatively) easy way to capture the conversation. In the end, the final formatting quality of the book is due in part to the limitations of the current ChatGPT framework and in part to my own

unwillingness to devote more than a couple of months to a project that will likely only amount to speculative fun and a patchy physics education from an unreliable tutor.

Nonetheless, please be assured that it does embarrass me to be publishing such unpolished material. At least the Conversation Volumes will be free to download in this edition, and hopefully any potential purchaser of the ebook will have already been forewarned of the shortcomings of the work discussed in this Preface — specifically, shoddy formatting and unreliable content. I promise to do better in future editions, if there's any reason to produce one.

For now, the first edition is complete. After much deliberation, I settled on this plan: publish the Core Volumes and the Work Series Volumes along with the front matter as an ebook available for purchase. Included in the title details will be acknowledgement of the book's potential shortcomings and a link to a supporting webpage. On this webpage, anyone can download a preview of the book and the Conversation Volumes for free. There will also be a space for anyone to leave comments and reviews.

Why not take it to a professional for review prior to publishing? I may be wrong, but from what I can gather, most physicists don't enjoy receiving unsolicited theories from unqualified sources. At least by making this book available to anyone interested, it can be reviewed by those with the time and inclination to tear it apart — and I sincerely hope they do. Any non-recreational value that can be derived from this work will rely on it.

As Carl Sagan wrote in *The Demon-Haunted World* (Random House, 1996):

"As I've tried to stress, at the heart of science is an essential balance between two seemingly contradictory attitudes — an openness to new ideas, no matter how bizarre or counterintuitive, and the most ruthless skeptical scrutiny of all ideas, old and new."

This book provides some new ideas, but it obviously needs help with the ruthless skeptical scrutiny.

If you are an expert and end up contributing to this story with your feedback, I sincerely thank you. Please know that even though the authors clearly haven't "stayed in their lane", the whole exercise was conducted with great respect for you and your profession. I recognise that this book is only possible because of the genius and dedication of real experts in their fields who produced the material that the AI was trained on. For those of you who don't stop with good ideas but pursue truth through science and hard work, I hope something in this book inspires you.

If, like me, you are not an expert but someone who nonetheless gets a little happiness hit from reading phrases like "coherence cascade statistics" or "information synchrony", I simply hope you enjoy it.

Whatever your background, if you are interested in reading more, I recommend downloading the free Conversation Volumes first before deciding to purchase the other volumes. Reading the conversation first should give you an idea of whether you'll find the ebook to be trash, treasure, or something in between.

I look forward to hearing your thoughts.

— **A.R. Valentine**

Postscript

Just before publishing, I cancelled my upgraded ChatGPT subscription and went back to the basic plan. As expected, none of my threads were migrated back during this process. Having substantially copied the conversation and being satisfied that it was at its absolute limit for reliable answers, I was okay with losing it.

Imagine my delight when I opened another personal workspace and found "faster light theory" sitting there alone in my thread history. Apparently, it wasn't lost in the migration but simply didn't migrate along with all the others. It appears to be more stable now, but is still likely at the end of its reliability. If it is of any interest, a copy of this first conversation can be made available on request.