

## JEREMY ENGLAND, Ph.D.

### PHYSICIST, ORDAINED RABBI, RHODES SCHOLAR, OPPENHEIM AWARD WINNER, MODERN DAY CHARLES DARWIN

Jeremy England is a theoretical physicist who got his start in the Boston area but now lives with his family in Israel. A native of New England, he received his technical training at Harvard (bachelors *summa cum laude* in Biochemical Sciences), Oxford (as a Rhodes scholar), and Stanford (Ph.D. in Physics, on a Hertz fellowship).

He has been a visiting scientist at the Weizmann Institute, a lecturer and research fellow at Princeton, and until 2019 he was an associate professor in the physics department at the Massachusetts Institute of Technology. Now a Principal Research Scientist at Georgia Tech's School of Physics, and Senior Director in Artificial Intelligence and Machine Learning at GlaxoSmithKline, Jeremy conducts both basic research on the origins of life and applied research in the area of precision medicine.

As a scientist who has also received orthodox rabbinical ordination (from Rav Chaim Brovender), Jeremy is keenly interested in the intersection between ideas from Torah and from science. He is author of a book about both topics, entitled *Every Life Is On Fire.* 

# **The Creator Speaks Through All Creations**

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If you want to understand how to know that God is there, the key is to recognize that there are other things that you think you know unquestionably, which are really just assumptions that you have found empirically useful. The whole fabric of your sensory experience (sights,

sounds, etc.) can be parsed in different ways,<sup>1</sup> but we usually take it as given that when we see and hear what seems like a person talking to us, this means there's a partner – an independent agent, a being with whom we can communicate – who is trying to send us a message. The reason we stick with this approach to interpreting what we sense is that it seems to work really well. By assuming the "people-shaped" parts of what we sense represent agents with thoughts and emotions like our own, we do a good job of predicting what we are going to see and hear next; indeed, every successful conversation involves making accurate predictions about what we'll sense over the course of the exchange.

In principle, the idea of conversing with the world's Creator works exactly the same way. Just as our fundamental belief in the reality of other people really rests on how successfully we've predicted our own experiences using the modeling assumption of their personality, so too can our belief in God become a testable method for interpreting events of the world and our lives. You can start by asking: Given what I observe and experience or hear about happenings in the world, what might these data tell me about the will of an all-powerful individual who meticulously chose every detail of these occurrences? Once I understand something about that will, does that help me to know about what will happen in my life and in the world? If so, then I have attained a state of mind that can fairly be called a practical and workable belief that God is there.

The problem, of course, is that the world is too vast and complex, and our knowledge of the world too simple and incomplete, for us to make much progress understanding the will of our Creator just by puzzling over the fragments of information we get from our own experience. This is why the Hebrew Bible was written down. By making numerous, highly specific, and substantive claims about the world's Creator (such as: God is merciful, God freed the Israelites from Pharaoh's enslavement, God loved Abraham), it means to give us a head start on how to know a bit about the God of Israel and what God wants from us. The most deeply-rooted and resilient belief in the God of Israel comes from studying what is taught about God and then trying to see whether these claims about God's personality make the world easier to predict and understand over the course of time. There's no shortcut to this kind of faith: as we walk the path, God teaches us to know and trust God.

#### Footnotes:

1. Do you see a number of animals, or a herd? A collision, or a crime?