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Brian Keating is Chancellor’s Distinguished Professor of Physics at UC San Diego and an experimental cosmologist. He works on observations of the cosmic microwave background, the leftover heat from the Big Bang. He is the Principal Investigator of the Simons Observatory, located at a 17,000-foot elevation in the Chilean Atacama desert. Keating conceived the first BICEP experiment located at the South Pole, installing a microwave telescope to observe the cosmic microwave background (CMB), the oldest detectable light in the universe, at six different frequencies.

Professor Keating received his PhD from Brown University in 2000, and currently teaches and does his research at the University of California, San Diego. He is a Fellow of the American Physical Society. In 2022, Keating received the Horace Mann Medal from Brown University and was inducted into the International Air & Space Hall of Fame. In 2024, he was invested as a member of the American Academy of Sciences and Letters.

Keating is the author of two books, *Losing The Nobel Prize* and *Into the Impossible*, and produced the first-ever audiobook by his intellectual hero, Galileo Galilei, *The Dialogue on Two World Systems*. He hosts the “Into the Impossible” podcast, which explains how we understand the world, scientifically and as humans. Each conversation brings together visionaries from the worlds of arts, sciences, humanities, and technology to discuss the nature of reality and how we collaborate to create the future.

You can learn more by visiting his website at:
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Free Fall to Faith: Einstein's Elevator and Spinoza's God

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In 1907, Albert Einstein had a revelation he would call "the happiest thought of my life." He realized that a person in a free-falling elevator would be unable to feel his own weight.[1] This simple observation led to his revolutionary principle of equivalence: The effects of gravity are indistinguishable from the effects of acceleration. This insight would reshape our understanding of the universe – and perhaps offers a compelling framework for contemplating the divine.

In Einstein's thought experiment, an observer in an elevator would be unable to determine whether he was stationary in a gravitational field or accelerating through space. This ambiguity reveals a profound truth: Perspective shapes reality, yet reality exists independently of perspective. Just as the laws of physics remain constant regardless of the observer's frame of reference, might there exist universal truths that transcend human perception?

The genius of Einstein's work lies in recognizing relativity and discovering the invariant – those aspects of reality that remain constant. The speed of light, he asserted, maintains its value regardless of the observer's motion.[2] This universality hints at a deeper order, a framework beyond our immediate experience, that governs all existence. Similarly, across human cultures and throughout history, we find invariant patterns: the emergence of consciousness, the existence of morality, and the mathematical nature of physical law.

These universal constants pose a compelling question: What serves as the absolute frame of reference in a universe of relative motion and perception? Einstein's theories suggest that space and time are relative yet point to an underlying reality that transcends our everyday experience. This mirrors our human urge to connect to the Divine – we seek an ultimate reference point, a foundation for existence itself.

Just as an observer in Einstein's elevator cannot distinguish between gravity and acceleration, our limited human perspective prevents us from directly perceiving the ultimate nature of reality. Yet, like Einstein's equations that reveal the hidden structure of spacetime, the rational contemplation of existence might point toward a transcendent order. The fact that the universe operates according to comprehensible laws suggests a profound underlying rationality.

The implications extend beyond philosophical speculation. Einstein's work demonstrated that we can only reconcile seemingly contradictory observations through higher-dimensional understanding. Similarly, the apparent tension between scientific materialism and spiritual intuition might dissolve when viewed from a more encompassing perspective. The Creator might be like the gravitational field in Einstein's equations – not directly observable, yet manifest in the very fabric of reality.

Einstein didn't believe in the personal, miracle-working Judeo-Christian God. Instead, he found spiritual resonance in Spinoza's conception of God – not as an anthropomorphic being but as the rational structure underlying nature.[3] He saw divine reality manifested in the "sublime ordering" of the cosmos. Just as his theories revealed a truth more profound than our everyday experience suggests, our search for the Divine requires us to think beyond our limited frame of reference. In the end, both relativity and divinity challenge us to acknowledge that the most profound truths might transcend our ordinary understanding while remaining fundamentally and utterly 'real' in an absolute sense.

Footnotes:

1. "I was sitting in a chair in the patent office at Bern when all of a sudden a thought occurred to me: 'If a person falls freely he will not feel his own weight.' I was startled. This simple thought made a deep impression on me. It impelled me toward a theory of gravitation." - Einstein, 1907
2. From Einstein's "On the Relativity Principle and the Conclusions Drawn from It" (1907)
3. "I believe in Spinoza's God, who reveals Himself in the lawful harmony of all that exists, but not in a God who concerns Himself with the fate and the doings of mankind." - Einstein, 1929