

"We have been living through a revolution in cosmology as wondrous as that initiated by Copernicus. Here is the essential, engrossing, and brilliant guide."

—IAN MCEWAN

**WHY THERE IS SOMETHING
RATHER THAN NOTHING**

A

UNIVERSE
FROM
NOTHING

Lawrence M. Krauss

Afterword by RICHARD DAWKINS

PRAISE FOR

A UNIVERSE FROM NOTHING

“In *A Universe from Nothing*, Lawrence Krauss has written a thrilling introduction to the current state of cosmology—the branch of science that tells about the deep past and deeper future of everything. As it turns out, everything has a lot to do with nothing—and nothing to do with God. This is a brilliant and disarming book.”

—**SAM HARRIS**, author of *The Moral Landscape*

“Beautifully navigating through deep intellectual waters, Krauss presents the most recent ideas on the nature of our cosmos, and of our place within it. A fascinating read.”

—**MARIO LIVIO**, author of *The Golden Ratio*

“A series of brilliant insights and astonishing discoveries have rocked the universe in recent years, and Lawrence Krauss has been in the thick of them. With his characteristic verve, and using many clever devices, he’s made that remarkable story remarkably accessible. The climax is a bold scientific answer to the great question of existence: Why is there something rather than nothing?”

—**FRANK WILCZEK**, Nobel Laureate and author
of *The Lightness of Being*

“In this clear and crisply written book, Lawrence Krauss outlines the compelling evidence that our complex cosmos has evolved from a hot, dense state and how this progress has emboldened theorists to develop fascinating speculations about how things really began.”

—**MARTIN REES**, author of *Our Final Hour*

“With characteristic wit, eloquence, and clarity Lawrence Krauss gives a wonderfully illuminating account of how science deals with one of the biggest questions of all: How could the universe’s existence arise from nothing? It is a question that philosophy and theology get themselves into a muddle over, but that science can offer real answers to, as Krauss’s lucid explanation shows. Here is the triumph of physics over metaphysics, reason and enquiry over obfuscation and myth, made plain for all to see: Krauss gives us a treat as well as an education in fascinating style.”

—**A. C. GRAYLING**, author of *The Good Book*

**“WHERE DID THE UNIVERSE COME FROM?
WHAT WAS THERE BEFORE IT? WHAT WILL THE
FUTURE BRING? AND FINALLY, WHY IS THERE
SOMETHING RATHER THAN NOTHING?”**

Lawrence Krauss's provocative answers to these and other timeless questions in a wildly popular lecture now on YouTube have attracted almost a million viewers. The last of these questions in particular has been at the center of religious and philosophical debates about the existence of God, and it's the supposed counterargument to anyone who questions the need for God. As Krauss argues, scientists have, however, historically focused on other, more pressing issues—such as figuring out how the universe actually functions, which can ultimately help us to improve the quality of our lives.

Now, in a cosmological story that rivets as it enlightens, pioneering theoretical physicist Lawrence Krauss explains the groundbreaking new scientific advances that turn the most basic philosophical questions on their heads. One of the few prominent scientists today to have actively crossed the chasm between science and popular culture, Krauss reveals that modern science *is* addressing the question of why there is something rather than nothing, with surprising and fascinating results. The staggeringly beautiful experimental observations and mind-bending new theories are all described accessibly in *A Universe from Nothing*, and they suggest that not only *can* something arise from nothing, something will *always* arise from nothing.

With his characteristic wry humor and wonderfully clear explanations, Krauss takes us back to the beginning of the beginning, presenting the most recent evidence for how our universe evolved—and the implications for how it's going to end. It will provoke, challenge, and delight readers as it looks at the most basic underpinnings of existence in a whole new way. And this knowledge that our universe will be quite different in the future from today has profound implications

and directly affects how we live in the present. As Richard Dawkins has described it: This could potentially be the most important scientific book with implications for supernaturalism since Darwin.

A fascinating antidote to outmoded philosophical and religious thinking, *A Universe from Nothing* is a provocative, game-changing entry into the debate about the existence of God and everything that exists. “Forget Jesus,” Krauss has argued, “the stars died so you could be born.”



Sign Up Here

Lawrence M. Krauss is a renowned cosmologist and Foundation Professor and Director of the Origins Project at Arizona State University. Hailed by *Scientific American* as a rare scientific public intellectual, he is the author of more than three hundred scientific publications and eight books, including the bestselling *The Physics of Star Trek*, and the recipient of numerous international awards for his research and writing. He is an internationally known theoretical physicist with wide research interests, including the interface between elementary particle physics and cosmology, where his studies include the early universe, the nature of dark matter, general relativity, and neutrino astrophysics. He received his PhD in physics from the Massachusetts Institute of Technology in 1982, then joined the Harvard Society of Fellows. In 1985 he joined the faculty of physics at Yale University, moving in 1993 to become Chairman of the Physics Department at Case Western Reserve University before taking up his current position at ASU in 2008. Krauss is a frequent newspaper and magazine editorialist and appears regularly on radio and television.

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Praise for *A Universe from Nothing*

“Nothing is not nothing. Nothing is something. That’s how a cosmos can be spawned from the void—a profound idea conveyed in *A Universe From Nothing* that unsettles some yet enlightens others. Meanwhile, it’s just another day on the job for physicist Lawrence Krauss.”

—Neil deGrasse Tyson, astrophysicist,
American Museum of Natural History

“People always say you can’t get something from nothing. Thankfully, Lawrence Krauss didn’t listen. In fact, something big happens to you during this book about cosmic nothing, and before you can help it, your mind will be expanding as rapidly as the early universe.”

—Sam Kean, author of
The Disappearing Spoon

Also by Lawrence M. Krauss

The Fifth Essence
Fear of Physics
The Physics of Star Trek

Beyond Star Trek:
From Alien Invasions to the End of Time

Quintessence:
The Mystery of the Missing Mass

Atom:
A Single Oxygen Atom's Journey from the Big Bang
to Life on Earth . . . and Beyond

Hiding in the Mirror:
The Quest for Alternate Realities, from Plato to String Theory

Quantum Man:
Richard Feynman's Life in Science

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*To Thomas, Patty, Nancy, and Robin,
for helping inspire me to create something
from nothing . . .*

*On this site in 1897,
Nothing happened.*

—Plaque on wall of Woody Creek Tavern,
Woody Creek, Colorado