

(continued from front flap)

world. He concludes that scientific thinking—the legacy of Anaximander—is only reliable when it constantly tests the limits of our current knowledge.



CARLO ROVELLI received his Ph.D. in physics at the University of Padua. He has conducted research at Imperial College, Yale University, the University of Rome, and the University of Pittsburgh and is currently professor of theoretical physics at the University of Marseille. He is author of more than 150 scholarly articles and the books *Quantum Gravity* and *What Is Time? What Is Space?*

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Front jacket art: A relief of Anaximander. (Courtesy of the Ministry of Cultural Heritage and Activities, Special Superintendence for the Archaeological Heritage of Rome). Back jacket photo: A long exposure of the night around the North Star. (Josch Hambach)

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THE FIRST SCIENTIST



ROVELLI



THE FIRST SCIENTIST



ANAXIMANDER AND HIS LEGACY

CARLO ROVELLI

The Story of the Ancient Greek Philosopher and How He Revolutionized the Way We Think About Our World

Carlo Rovelli, a leading theoretical physicist, uses the figure of Anaximander as the starting point for an examination of scientific thinking itself: its limits, its strengths, its benefits to humankind, and its controversial relationship with religion. Anaximander, the sixth-century BC Greek philosopher, is often called the first scientist because he was the first to suggest that order in the world was due to natural forces, not supernatural ones. He is the first person known to understand that the Earth floats in space; to believe that the sun, the moon, and the stars rotate around it—seven centuries before Ptolemy; to argue that all animals came from the sea and evolved; and to posit that universal laws control all change in the world. Anaximander taught Pythagoras, who would build on Anaximander's scientific theories by applying mathematical laws to natural phenomena.

In the award-winning *The First Scientist: Anaximander and His Legacy*, translated here for the first time in English, Rovelli restores Anaximander to his place in the history of science by carefully reconstructing his theories from what is known to us and examining them in their historical and philosophical contexts. Rovelli demonstrates that Anaximander's discoveries and theories were decisive influences, putting Western culture on its path toward a scientific revolution. Developing this connection, Rovelli redefines science as a continuous redrawing of our conceptual image of the

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