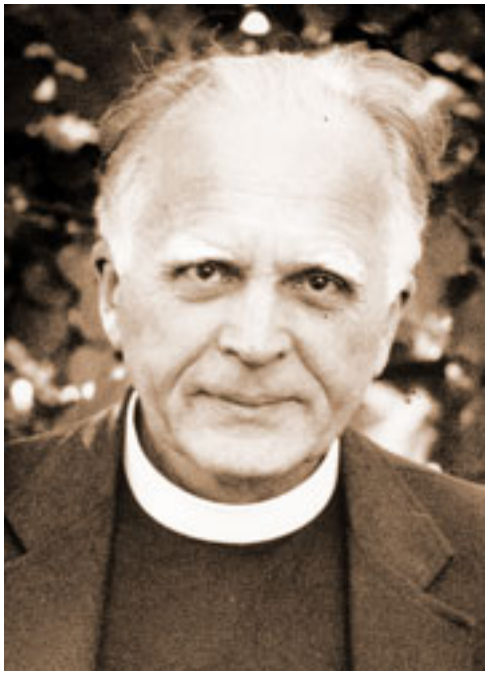
Rev. Fr. Prof. Stanley L. Jaki, OSB
Distinguished Professor of Physics at Seton Hall University, South Orange, USA, and Priest of the Benedictine Order



Most important awards, prizes and academies

Lecomte du Nouy Prize (1970); Templeton Prize (1987). Gifford Lecturer, University of Edinburgh (1974-75, 1975-76). Pontifical Academy of Sciences (1990).

Summary of scientific research

His application of Gödel's theorems, first in *The Relevance of Physics* (1967) and much more thematically in *God and the Cosmologists* (1980), to physical theories that aimed at fundamental completeness were considerably important. Such theories are systems of elementary particles, unified field theories, and comprehensive cosmological models. All such theories are heavily, and at times esoterically, mathematical and therefore must embody a far from trivial system of arithmetic. Therefore they are subject to the limitations set by Gödel's theorems in the sense that they cannot have the proofs of consistency within themselves. This should seem to undermine claims that can be heard again and again about a final physical theory having been formulated. The theory may be final but it cannot be proven to be such. If physics has a built-in incompleteness, reductionist and scientistic claims would be all the more suspect. This

incompleteness of physics further supports what is known also as the contingency of all material beings, including their totality, the universe. The philosophy of science has indeed a theistic edge, although this by itself does not relate to the practice of the scientific method. Only when a scientific methodology is constructed which is either materialistic or agnostic would possible harmful precepts emerge for that practice. The history of science shows that all great creative advances in at least the physical sciences were made in terms of an epistemology which also underlies the classical proofs of the existence of God. These two themes were given a detailed presentation in his Gifford Lectures, *The Road of Science* and the *Ways to God*. Historically, too, this theistic perspective of science emerges from what he called the repeated stillbirths and the only viable birth of science. The former occurred in all great ancient cultures, whereas the latter is intimately tied to medieval Christianity. It was Christianity, and especially its dogma about the divinity of the Incarnate Logos, that gave a special strength to the biblical notion of a coherent uni- verse, fully ordered in all its parts, an idea indispensable to the emergence of Newtonian science. All these themes are set forth in his *Science and Creation* and *The Savior of Science*. There and elsewhere he seized every opportunity to state his indebtedness to the writings of Pierre Duhem, to whom he devoted four monographs. Strange as this may seem, there was some originality in his insistence that any philosophical system must account for the means (usually a book) that carries its message. He set forth such a system in his book *Means to Message: A Treatise on Truth*. There he applied this principle to the articulation of a dozen major philosophical topics.

Main publications

Publications relating to the history and philosophy of science in chronological order. Jaki, S.L., *The Relevance of Physics* (1967); Jaki, S.L., *Brain, Mind and Computers* (1969) (Lecomte du Nouy Prize, 1970); Jaki, S.L., *The Paradox of Olbers' Paradox* (1969); Jaki, S.L., *The Milky Way: An Elusive Road for Science* (1972); Jaki, S.L., *Science and Creation: From Eternal Cycles to an Oscillating Universe* (1974); Jaki, S.L., *The Road of Science and the Ways to God* (Gifford *Lectures*: University of Edinburgh (1975 and 1976); Jaki, S.L., *The Origin of Science and the Science of its Origin* (Fremantle Lectures, Balliol College, Oxford, 1977); Jaki, S.L., *Cosmos and Creator* (1978); Jaki, S.L., *Planets and Planetarians: A History of Theories of the Origin of Planetary Systems* (1978); Jaki, S.L., *Angels, Apes and Men* (1981); Jaki, S.L., *Uneasy Genius: The Life and Work of Pierre Duhem* (1984); Jaki, S.L., *Chesterton: A Seer of Science* (1986); Jaki, S.L., *Chance or Reality and Other Essays* (1988); Jaki, S.L., *The Physicist as Artist: The Landscape of Pierre Duhem* (1988); Jaki, S.L., *The Absolute beneath the Relative and Other Essays* (1988); Jaki, S.L., *The Savior of Science* (Wethersfield Institute Lectures, 1987) (1988); Jaki, S.L., *Miracles and Physics* (1989); Jaki, S.L., *God and the Cosmologists* (Farmington Institute Lectures, Oxford, 1988) (1989); Jaki, S.L., *The Only Chaos and Other Essays* (1990); Jaki, S.L., *The Purpose of It All* (Farmington Institute Lectures, Oxford, 1989) (1990); Jaki, S.L., *Cosmos in Transition: Studies in the History of Cosmology* (1990); Jaki, S.L., Olbers Studies (1991); Jaki, S.L., *Scientist and Catholic: Pierre Duhem* (1991); Jaki, S.L., *Reluctant Heroine: The Life and Work of Hélène Duhem* (1992); Jaki, S.L., *Universe and Creed* (1992); Jaki, S.L., *Genesis*

1 through the Ages (1992) (2nd rev. and enlarged edition, 1998); Jaki, S.L., *Is there a Universe?* (1993); Jaki, S.L., *Patterns or Principles and Other Essays* (1995); Jaki, S.L., *Bible and Science* (1996); Jaki, S.L., *Means to Message: A Treatise on Truth* (1999); Jaki, S.L., *The Limits of a Limitless Science and Other Essays* (2000). Translations with introduction and notes: *The Ash Wednesday Supper* (Giordano Bruno) (1975); *Cosmological Letters on the Arrangement of the World Edifice* (J.-H. Lambert) (1978); *Universal Natural History and Theory of the Heavens* (I. Kant) (1981).