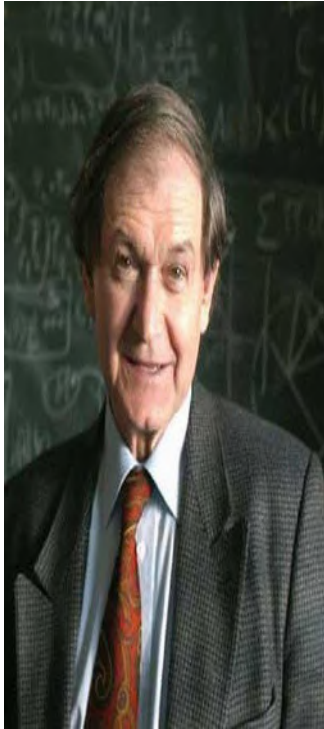


Author of the Week: Roger Penrose



Roger Penrose was born in Colchester, England, on August 8, 1931. The British mathematician and physicist, Sir Roger Penrose made striking and original contributions to the study of geometry, relativity, quantum mechanics, and the human mind. After obtaining a Ph.D. in algebraic geometry from the University of Cambridge in 1957, Penrose held temporary posts at a number of universities in both England and the United States. From 1964 to 1973 he served as reader and eventually professor of applied mathematics at Birkbeck College, London. From 1973 he held the Rouse-Ball Chair of Mathematics at the University of Oxford. He was knighted for his services to science in 1994. He and Stephen Hawking studied black holes in collaboration and the two of them identified the basic characteristics of black holes, which result from the collapse of large stars.

“It is hard to see how one could begin to develop a quantum-theoretical description of brain action when one might well have to regard the brain as “observing itself” all the time!” --- Roger Penrose

His Life and career

Penrose became interested in the problem of defining consciousness and wrote two books in which he argued that quantum mechanics is needed to explain the conscious mind—*The Emperor’s New Mind* (1989) and *Shadows of the Mind* (1994). He also wrote *The Road to Reality* (2004), an extensive overview of mathematics and physics. In *Cycles of Time: An Extraordinary New View of the Universe* (2010), Penrose posited his theory of conformal cyclic cosmology, formulating the Big Bang as an endlessly recurring event.

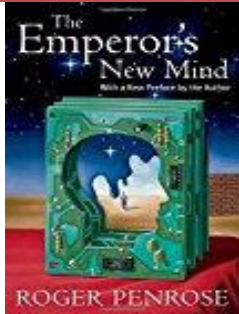
Roger’s numerous awards include the Eddington Medal, the Dirac Medal, the Albert Einstein Medal, and the de Morgan Medal. He is a past President of the International Society on General Relativity and Gravitation. Roger was knighted in 1994, and appointed to the Order of Merit in 2000. He received the Copley Medal of the Royal Society in 2008.

Roger invented twister theory, a key tool in quantum theory. He proposed the cosmic censorship hypothesis — an idea of how the effects of the unpredictability of singularities are ‘hidden’ from us. His mathematical discoveries include a non-periodic form of tiling — Penrose tiling — since observed experimentally in quasicrystals.

Important Links:

- <http://biography.yourdictionary.com/roger-penrose>
- <https://www.britannica.com/biography/Roger-Penrose>

Books by Roger Penrose



Title: Emperor's new mind: concerning computers, minds and the laws of physics

Author: Penrose, Roger

Publisher: Oxford University Press

Call No.: 006.3 PEN

Accession No.: 014348



Title: Nature of space and time

Author: Penrose, Roger

Publisher: Princeton University Press

Call No.: 530.11 HAW

Accession No.: 022779



Title: On space and time

Author: Connes, Alain

Publisher: Cambridge University Press

Call No.: 523.1 ONS

Accession No.: 004335

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