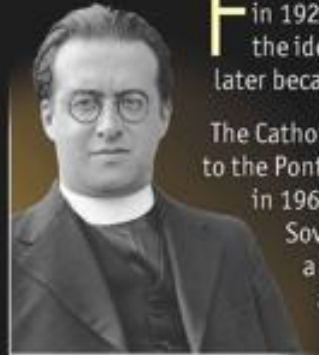


Georges Lemaître, inventeur du Big Bang

Georges Lemaître

(1894-1966) Astronomer, Physicist, Catholic Priest
FATHER OF THE BIG BANG & MODERN COSMOLOGY



Fr Georges Lemaître, a Belgian priest and astrophysicist, published a paper in 1927 in the *Annals of the Scientific Society of Brussels* that first presented the idea of an expanding cosmos. In 1931, Fr Lemaître proposed what later became known as the Big Bang theory of the origin of the universe.

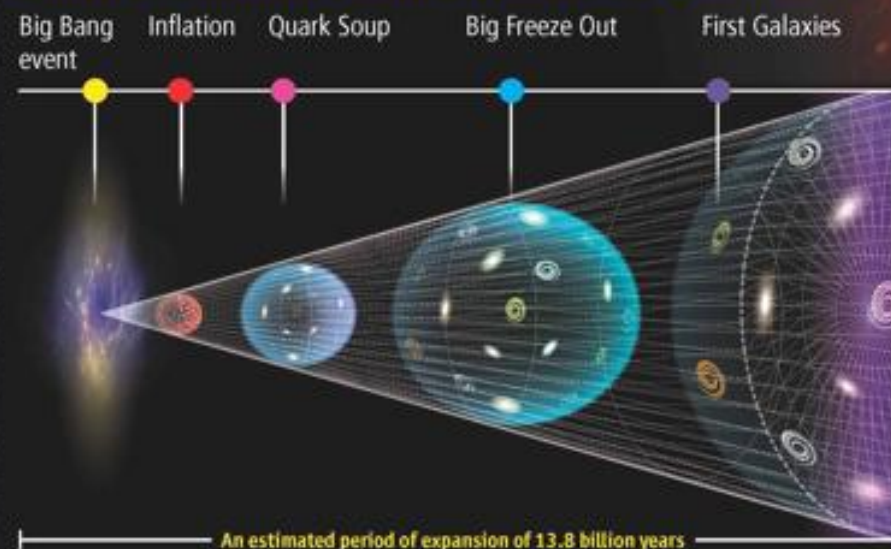
The Catholic Church honoured Fr Lemaître's work. He was elected to the Pontifical Academy of Sciences in 1936 and named prelate in 1960. By contrast, as late as 1948, astronomers in the Soviet Union were urged to condemn the Big Bang as a reactionary theory that encouraged clericalism, a hostility shared by many scientists and philosophers worldwide until the 1960s.

Besides showing the compatibility of faith and science, the story of Fr Lemaître illustrates the way in which minds and cultures shaped by the belief that God is a Trinity of reason and love have proved fruitful in perceiving order in the universe. Moreover, it is arguable that belief in God who is beyond creation has freed us to theorise about the causation and change of the cosmos as a whole, rather than simply accepting the totality of material reality as an eternal, unchanging given.

"Scientific progress is the discovery of a more and more comprehensive simplicity."

Fr Georges Lemaître

Universal expansion in a modern version of the Big Bang theory



Fr Lemaître predicted in 1927 that the recessional velocity of distant galaxies would increase in proportion to their distance, like the separation of spots on an expanding balloon. Two years later Edwin Hubble confirmed the existence of that law, which has since been validated by space-based telescopes to a high degree of accuracy.

- Georges Lemaître was the first person to propose what became the Big Bang theory through his 'Hypothesis of the primeval atom'
- Scientists later built on his ideas to form the modern theory of the big bang.

