

Georges Lemaître, Dirac Equation and Spinors

Professor Dominique Lambert

Summary:

The lecture is aiming to introduce a less-known part of Georges Lemaître's work: his contributions to the study of a generalization of Dirac equation proposed by Eddington. We will see that Lemaître was lead to study some kind of Majorana spinors. We will try to understand the links between this work and conformal and projective geometries. This lecture will give us also the opportunity to describe for the first time his still now unedited papers entitled: "Spineurs et Quanta" (1955), "Les spineurs et la physique quantique" (1956) which is directly connected with his studies of Clifford and Jordan algebras, and with his conversations with Elie Cartan and Jacques Tits.

Lecture co-financed by the European Union in scope of the European Social Fund