RELATIVISTIC QUANTUM MECHANICS

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The goal of the talk is to introduce the mathematical framework of the Relativistic Quantum Mechanics. We will study the Dirac Equation and its relativistic invariance, we will present the Free Dirac Hamiltonian, its properties and how particles and antiparticles are derived from it. We will also study the Atomic Hamiltonian and finally the Dirac Equation in Schwarzschild spacetime.