

Coordinate System of the Quantum Mechanics for a Point Particle

$\Psi: \mathbb{R}^4 \longrightarrow \mathbb{C}$ a function

M_q
↓

$M_q(\Psi)$ a history

$\forall t; \left[\text{The quantum state of the particle is} \right.$

$\text{state}(\Psi(\square, t))$

$\left. \text{at the time clock}(t). \right]$

$\psi: \mathbb{R}^3 \longrightarrow \mathbb{C}$

a function

state

$\text{state}(\psi)$

a quantum state

$\Psi(\square, t): \mathbb{R}^3 \longrightarrow \mathbb{C}$

$[\Psi(\square, t)](x, y, z) = \Psi(x, y, z, t)$