AI and quantum mechanics

YKY

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Summary

• QM

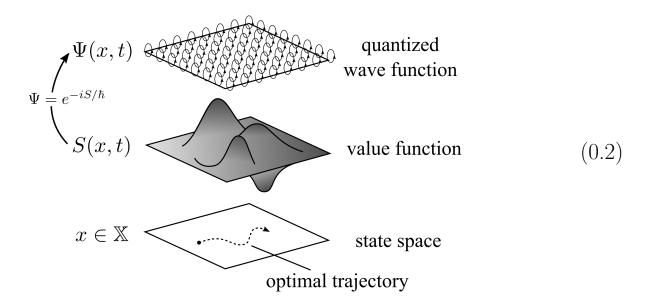
0 Background

Like this:

$$S \in \mathbb{R} \quad \vdots \\ \downarrow \qquad \vdots \\ e^{-\frac{iS}{\hbar}} \quad \boxed{\mathbb{T}}$$

$$\begin{array}{c|c}
\mathbb{R} \\
|) \vdots \\
|) h \\
|) h \\
|) h \\
|) \vdots \\
\end{array} (0.1)$$

Like this:



The following is probably a theorem:

Theorem 1. For each classical differential equation

$$\Box S = H \tag{0.3}$$

there corresponds a quantum version

$$\Box \Psi = \hat{H} \Psi \tag{0.4}$$

where $\Psi = e^{-iS}$.

References

欢迎提问和讨论 ②