$$\hbar \frac{\partial \phi}{\partial t} j = \frac{\left[-j\hbar\nabla - e\mathbf{A}\right]^2}{2m}\phi + eV\phi + U\phi, \quad \phi = \phi_0 \exp\left(-I\sigma_3 p \cdot x\right)$$

where $j = I\sigma_3$ is the spacetime bivector, $\nabla = \sigma_i \partial_i$ is the spacetime vector derivative, and p and x are the spacetime four-momentum and position four-vector, respectively. This is the coordinate-independent formulation of the Schroedinger equation in the Geometric Calculus formulation.