

Illustration of Bug When Importing Equations With ħ From Microsoft Word

Bug 1: Schroedinger's Equation

In the following MathType 5.0 object, the two instances of hbar are rendered as h when imported into OpenOffice.org. The vector arrows over the r's are also rendered too high (Issue 3780, marked Closed, but still broken).

Schroedinger's Equation:
$$j\hbar \frac{\partial \psi(r,t)}{\partial t} = -\frac{\hbar^2}{2m} \nabla^2 \psi(\vec{r},t) + U(\vec{r},t) \psi(\vec{r},t)$$

The intended formula is

$$j \cdot \hbar \cdot \frac{\partial \psi(\vec{r},t)}{\partial t} = -\frac{\hbar^2}{2 \cdot m} \cdot \nabla^2 \psi(\vec{r},t) + U(\vec{r},t) \cdot \psi(\vec{r},t)$$

Bug 2: Momentum Operator

In the following Microsoft Equation Editor object, when the Microsoft Word 2003 document is first imported into OpenOffice.org, the hbar is displayed as a placeholder box. After double-clicking on the equation in OpenOffice.org, the placeholder box is correctly rendered as hbar.

Momentum operator:
$$-\frac{j}{\hbar} \frac{\partial}{\partial x}$$