

$$\partial_t \psi = \frac{1}{\alpha} \partial_x^2 \psi$$

$${}^x_t \left(\exp \left(\frac{1}{\alpha} \partial_x^2 \right) \right) = \sqrt{\frac{\alpha}{4\pi t}} \exp \left(-\frac{\alpha}{4t} x^2 \right)$$

$${}^x_t \psi = \int_{dz}^{\mathbb{R}} {}^x_t \left(\exp \left(\frac{1}{\alpha} \partial_x^2 \right) \right) {}^z_0 \psi$$

$${}^y_s \psi = \int_{dz}^{\mathbb{R}} {}^y_s \left(\exp \left(\frac{1}{\alpha} \partial_x^2 \right) \right) {}^z_r \psi$$