

## DESCRIPTION

BHS

*Schrodinger Equation*

$$ih_t + 0.5h_{xx} + |h|^2h = 0$$

$$x \in [-5, 5], \quad t \in [0, \pi/2]$$

$$h(0, x) = 2 \operatorname{sech}(x)$$

$$h(t, -5) = h(t, 5), \quad h_x(t, -5) = h_x(t, 5)$$

## REFERENCES

- [1] Maziar Raissi, Paris Perdikaris, and George Em Karniadakis. Physics Informed Deep Learning (Part I): Data-driven Solutions of Nonlinear Partial Differential Equations.