DESCRIPTION

BHS

$$Kuramoto - Sivashinsky(KS)equation$$
$$u_t = -uu_x - u_{xx} - u_{xxxx}$$
$$x \in [-10, 10], t \in [0, 50]$$
$$u(0, x) = -\sin(\pi x/10)$$
$$u(t, -10) = u(t, 10)$$
$$u_x(t, -10) = u_x(t, 10)$$
$$u_{xx}(t, -10) = u_{xx}(t, 10)$$
$$u_{xxx}(t, -10) = u_{xxx}(t, 10)$$

References

[1] Maziar Raissi, Paris Perdikaris. Deep Hidden Physics Models: Deep Learning of Nonlinear Partial Differential Equations.