

Correct PDE: 0.003183 $u_{xx}$ - 1.0 $uu_x$ (viscosity = 0.01/ $\pi$ )	
Model	Discovered equation and parameters
128x64 (x,t train dataset)	
PINN	0.0033735 $u_{xx}$ - 0.99912 $uu_x$
STLSQ	0.06420 $u$ + 0.00505 $u_{xx}$ - 1.06304 $uu_x$ + + 0.00469 $uuu_{xx}$ - 0.00001 $uu_{xxx}$
FROLS	-0.418 $u$
SR3	0.064 $u$ + 0.005 $u_{xx}$ - 1.063 $uu_x$ + 0.005 $uuu_{xx}$
SSR	0.064 $u$ + 0.005 $u_{xx}$ - 1.063 $uu_x$ + 0.005 $uuu_{xx}$
256x128 (x,t train dataset)	
PINN	0.0031779 $u_{xx}$ - 0.99942 $uu_x$
STLSQ	0.00395 $u_{xx}$ - 1.00869 $uu_x$ + 0.00126 $uuu_{xx}$
FROLS	0.015 $u$ + 0.004 $u_{xx}$ - 1.003 $uu_x$
SR3	0.004 $u_{xx}$ - 1.009 $uu_x$ + 0.001 $uuu_{xx}$
SSR	0.011 $u$ + 0.004 $u_{xx}$ - 1.011 $uu_x$ + 0.001 $uuu_{xx}$
512x256 (x,t train dataset)	
PINN	0.0031403 $u_{xx}$ - 0.99850 $uu_x$
STLSQ	0.00339 $u_{xx}$ - 1.00534 $uu_x$ + 0.00041 $uuu_{xx}$
FROLS	0.006 $u$ + 0.004 $u_{xx}$ - 1.006 $uu_x$
SR3	0.003 $u_{xx}$ - 1.005 $uu_x$
SSR	0.006 $u$ + 0.003 $u_{xx}$ - 1.007 $uu_x$