

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	$0.006 u + 0.003 u_{xx} - 1.007 uu_x$