

Correct PDE 
$$u_t + (uu_x + vu_y) = -p_x + 0.01(u_{xx} + u_{yy})$$
$$v_t + (uv_x + vv_y) = -p_y + 0.01(v_{xx} + v_{yy})$$
$$u_t + 0.009(uu_x + vu_y) = -p_x + -0.00111(u_{xx} + u_{yy})$$
$$u_t + 0.009(uv_x + vu_y) = -p_x + 0.00111(v_{xx} + v_{yy})$$

 $v_t + 0.009(uv_x + vv_y) = -p_y + -0.00111(v_{xx} + v_{yy})$ 

Identified PDE (1% noise)

 $u_t + -0.000(uu_x + vu_y) = -p_x + 0.00951(u_{xx} + u_{yy})$ 

 $v_t + -0.000(uv_x + vv_y) = -p_y + 0.00951(v_{xx} + v_{yy})$