

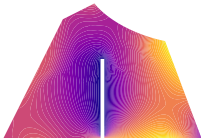
Input

Diffusion coefficient field  $a(\mathbf{x})$ 

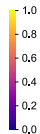
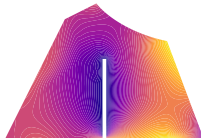
Darcy flow



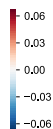
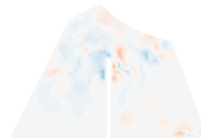
Output

Pressure field  $u(\mathbf{x})$ 

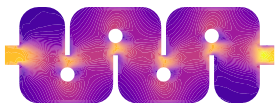
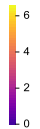
NORM Predicted



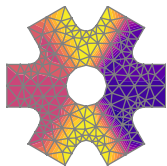
Prediction error of NORM

Velocity of  $t_1$   $\mathbf{v}(\mathbf{x}, t_1)$ 

Pipe flow

Velocity of  $t_2$   $\mathbf{v}(\mathbf{x}, t_2)$ 

Temperature boundary condition



Steady-state temperature field

