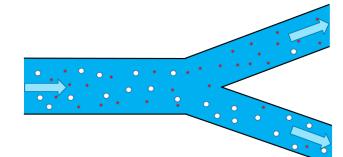


$$\min_{\rho, \vec{w}} \quad \frac{1}{2} \|\rho - \widehat{\rho}\|_{L_2(\Sigma)}^2 + \frac{\beta}{2} \|\vec{w}\|_{L_2(\Sigma)}^2$$



$$\partial_t 
ho = 
abla^2 
ho - 
abla \cdot (
ho ec{w}) + 
abla \cdot (
ho 
abla V_{ ext{ext}}) + 
abla \cdot \int_{\Omega} 
ho(ec{x}) 
ho(ec{x}') 
abla V_2(|ec{x} - ec{x}'|) dec{x}'$$

