

Navier-Stokes Generative Adversarial Network

1 Mathematical model

We consider the physic information residual equation that

$$r_{cty} = \nabla \cdot \mathbf{u} \tag{1}$$

$$r_u = \mathbf{u}_t + \sigma \mathbf{u} + (\mathbf{u} \cdot \nabla) \mathbf{u} - \mu \Delta \mathbf{u} + \nabla p \tag{2}$$

$$r_c = c_t + \sigma c + (\mathbf{u} \cdot \nabla) c - \mu \Delta c \tag{3}$$

2 Network Construction

References