$$u(\theta_i, t_i) \xrightarrow{\mathcal{F}_t} \widehat{u}(\theta_i) \xrightarrow{\mathcal{F}_{\theta}} \widetilde{u}_i$$
 $u(\theta_i, t_i) \xrightarrow{\mathcal{F}_{\theta}^{-1}} \widehat{u}(\theta_i) \xrightarrow{\mathcal{F}_t^{-1}} u(\theta_i, t_i)$

$$\widetilde{u}_i = \widetilde{u}_i$$
+ non reflecting boundary

row interface

 $\widetilde{u}_i = \widetilde{u}_i$ + non reflecting boundary condition on spurious frequencies