Invertible NN

- $egin{aligned} \mathbf{v}_k' > = egin{aligned} \Gamma^\pm(\mathbf{v}_k; \zeta_{\mathbf{v}_k}) \end{aligned}$
- 2. Full-step **half** x update:

1. Half-step full v update:

$$\mathbf{x}_{k}' = \mathbf{m}^{k} \odot \mathbf{x}_{k} + \mathbf{\bar{m}}^{k} \odot \mathbf{\Lambda}^{\pm} \left[\mathbf{\bar{x}}_{k}; \zeta_{\mathbf{\bar{x}}_{k}} \right]$$
3. Full-step **half** x update:

 $egin{align} egin{align} oldsymbol{\mathbf{x}}_k'' = oldsymbol{ar{\mathbf{m}}}^k \odot ar{\mathbf{x}}_k' + m^k \odot oldsymbol{\Lambda}^{\pm} \left[\mathbf{x}_k'; \zeta_{\mathbf{x}_k'}
ight] \end{aligned}$

4. Half-step full
$$v$$
 update:
$$\mathbf{v}_k'' = \frac{\Gamma^{\pm}(\mathbf{v}_k'; \zeta_{\mathbf{v}_k})}{\Gamma^{\pm}(\mathbf{v}_k'; \zeta_{\mathbf{v}_k})}$$