Invertible NN

 $ullet v_k' \, = \, rac{\Gamma^\pm(v_k;\zeta_{v_k})}{2}$ 2. Full-step **half** x update:

1. Half-step full *v* update:

$$x_k' = m^k \odot x_k + \overline{m}^k \odot \Lambda^{\pm}(x_k; \zeta_{x_k})$$
3. Full-step **half**  $x$  update:

$$x_k'' = ar{ar{m}}^k \odot x_k' + ar{m}^k \odot ar{\Lambda}^\pm(x_k'; \zeta_{x_k'})$$
4. Half-step full  $v$  update:

4. Half-step full v update:  $\circ \ v_k'' = rac{\Gamma^\pm(v_k';\zeta_{v_k'})}{\Gamma^\pm}$