Backpropagation parity check conditions:







Frozen bits





















- $\mathbf{u}_{\mathcal{F}_{\ell-1}} = \left(\hat{\mathbf{u}}_{\mathcal{A}_{\ell}} \mathbf{G}_{N_{\ell-1}}^{\top}\right)_{\mathcal{F}_{\ell-1}} \text{ for } \ell \in \{2, 3, \dots, L\}$