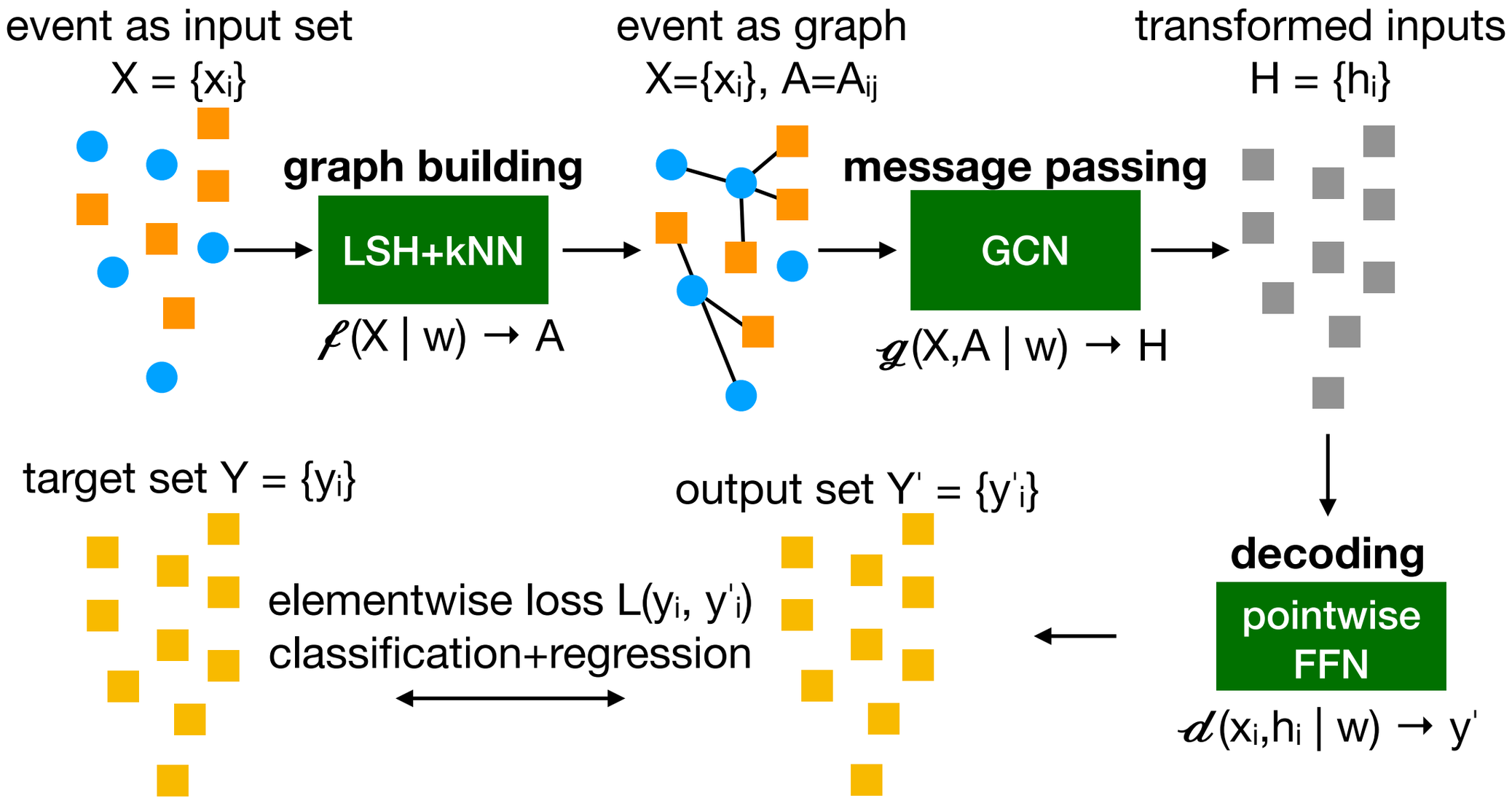


$x_i$ = [type, $p_T$, $E_{hcal}$, $E_{ecal}$, η, ϕ, $η_{outer}$, $ϕ_{outer}$, track charge, ...], type ∈ {track, calo. cluster}

$y_i$ = [PID, $p_T$, E, η, ϕ, particle charge, ...], PID ∈ {none, ch.had., n.had., γ, $e^{±}$, $μ^{±}$}

$h_i \in \mathbb{R}^N$, N = 256

trainable neural networks: $\ell$, $g$, $d$