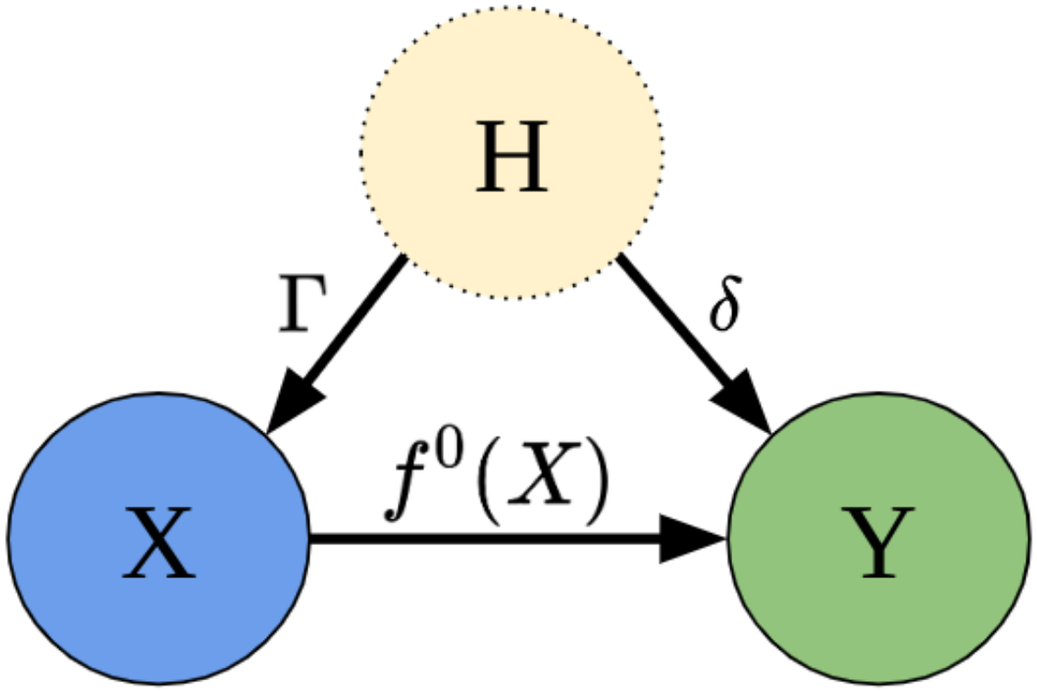

$$X \leftarrow H^T\Gamma + E$$
$$Y \leftarrow f^0(X) + H^T\delta + \nu$$
$$X \in \mathbb{R}^p, Y \in \mathbb{R}, H \in \mathbb{R}^q$$

- X are p dimensional predictors
- H are q dimensional unobserved hidden confounder
- Y is the response
- E and ν are error terms, e.g. gaussians

- Γ linear effect of H on X
- δ linear effect of H on Y
- $f^0(X)$ causal effect of X on Y