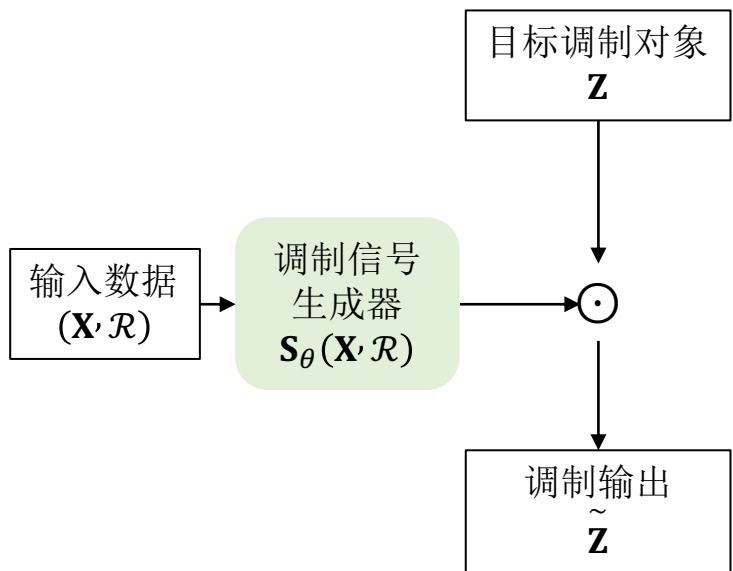


## 乘性调制

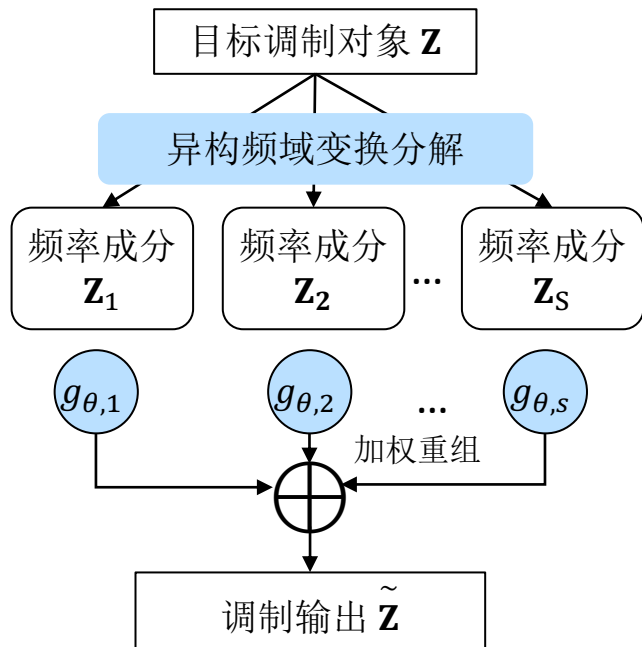
$$\mathcal{M}_\theta(\mathbf{Z}; \mathbf{X}; \mathcal{R}) = \mathbf{Z} \odot \mathbf{S}_\theta(\mathbf{X}; \mathcal{R}),$$



对表示流中不同成分  
进行选择性的增强或抑制

## 组合式调制

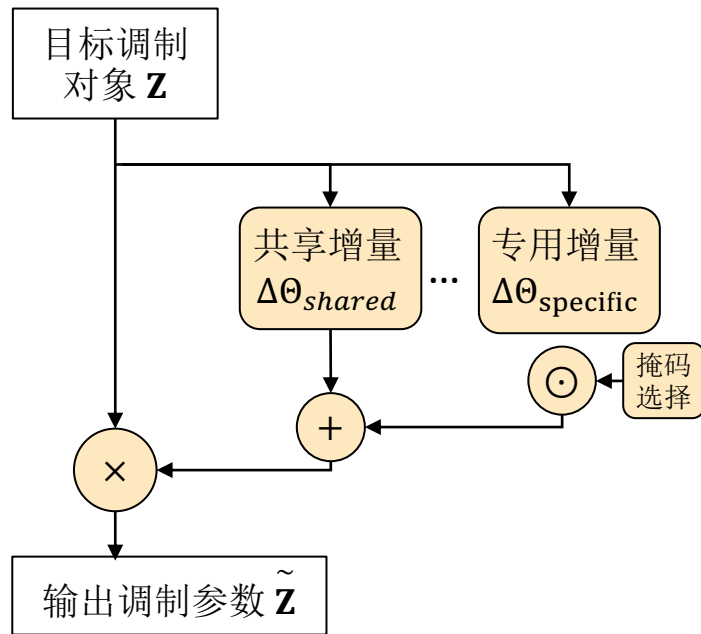
$$\mathcal{M}_\theta(\mathbf{Z}; \mathbf{X}; \mathcal{R}) = \bigoplus_{s=1}^S \mathbf{Z}_s \cdot g_{\theta,s}(\mathbf{X}; \mathcal{R}),$$



将更新分解为不同频段成分  
分别建模后重组

## 结构分解调制

$$\begin{aligned} \mathcal{M}_\theta(\mathbf{Z}; \mathbf{X}; \mathcal{R}) \\ = \mathbf{Z} \cdot (\Delta\theta_{shared} + \mathbf{m} \odot \Delta\theta_{specific}), \end{aligned}$$



将更新分解为共享与专用增量，  
建模公共/特有信息