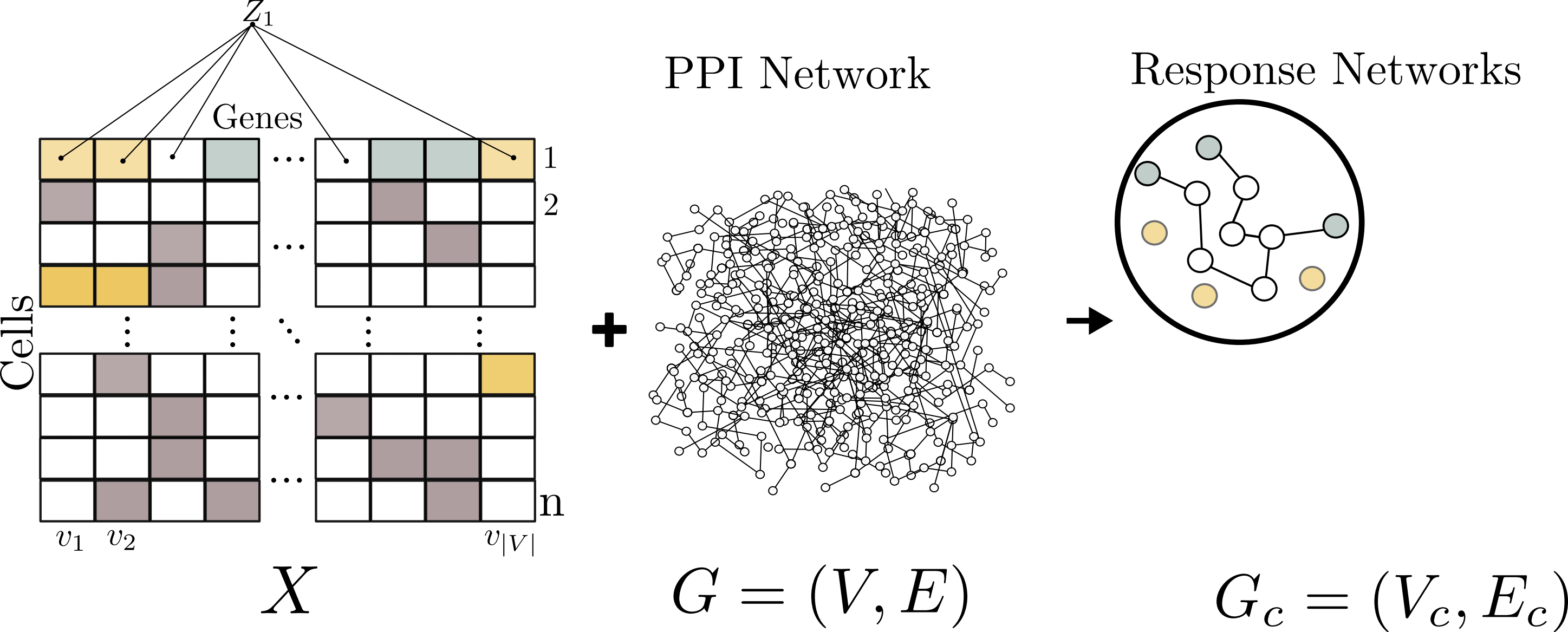




$$\min \sum_{c \in C} \left(\overset{\text{PCST}}{\sum_{e \in G_c} w(e) + \beta_1 \sum_{v \notin V_c} X(c, v)} + \beta_2 \sum_{v \in Z_c - V_c} \sum_{\substack{d \in C, d \neq c \\ v \in V_d}} X(d, v) \right)$$