

$$\begin{aligned}
& \underset{\substack{z \in \mathcal{L}^n \\ \Pi_1, \Pi_2 \in \{0,1\}^{n \times n}}}{\text{minimize}} && - \|z \odot \Pi_1^\top s_1\|_1 - \|(1 - z) \odot \Pi_2^\top s_2\|_1 && \text{saliency} \\
& && + \beta \sum_{(i,j) \in \mathcal{N}} \psi(z_i, z_j) + \gamma \sum_{(i,j) \in \mathcal{N}} \phi_{i,j}(z_i, z_j) && \text{smoothness} \\
& && - \eta \sum_i \log p(z_i) + \xi \sum_{k=1,2} \langle \Pi_k, C \rangle && \begin{array}{l} \text{mixing ratio} \\ \text{transport} \end{array} \\
& \text{subject to} && \Pi_k 1_n = 1_n, \quad \Pi_k^\top 1_n = 1_n \quad \text{for } k = 1, 2.
\end{aligned}$$