$$\underset{\Pi_1,\Pi_2\in\{0,1\}^{n\times n}}{\text{minimize}} \; -\|z\odot\Pi_1^\intercal s_1\|_1 - \|(1-z)\odot\Pi_2^\intercal s_2\|_1 + \xi\sum_{k=1,2}\langle\Pi_k, C\rangle$$

$$\text{subject to} \;\; \Pi_k 1_n = 1_n,\; \Pi_k^\intercal 1_n = 1_n \quad \text{for } k=1,2.$$