1) introducing Lagrange multipliers

$$\mu_1 = \min_X \; \max_W \left\{ \mathrm{tr}\, (AXBX^T + CX^T) + \sum_{ij} W_{ij}(X_{ij}^2 - X_{ij}) \right\}$$

2) interchanging min and max and homogenizing problem

$$\mu_1 \geq \mu_{\mathcal{L}} = \max_W \; \min_{X, x_0^2 = 1} \left\{ \mathrm{tr}\, (AXBX^T + W(X \circ X)^T + x_0(C - W)X^T) \right\}$$

3) introducing Lagrange multiplier w_0 for constraint on x_0

$$\mu_1 \geq \mu_{\mathcal{L}} \geq \mu_r = \max_{W, w_0} \; \min_{X, x_0} \; \Big\{ \mathrm{tr}\, (AXBX^T + W(X \circ X)^T + w_0 x_0^2 + x_0(C - W)X^T) - w_0 \Big\}$$