$$\max OF = \sum_i U_i P_i$$

$$U_i = U_i^{xl} * U_i^{xu} * U_i^{yl} * U_i^{yu}$$

$$X_L \leq X_U$$

$$Y_L \leq Y_U$$

$$X_U + M * (1 - U_i^{xu}) \geq X_i$$

$$X_U - M * (U_i^{xu}) \leq X_i$$

$$X_L - M * (1 - U_i^{xl}) \leq X_i$$

$$X_L + M * (U_i^{xl}) \geq X_i$$

$$Y_U + M * (1 - U_i^{yu}) \geq Y_i$$

$$Y_U - M * (U_i^{yu}) \leq Y_i$$

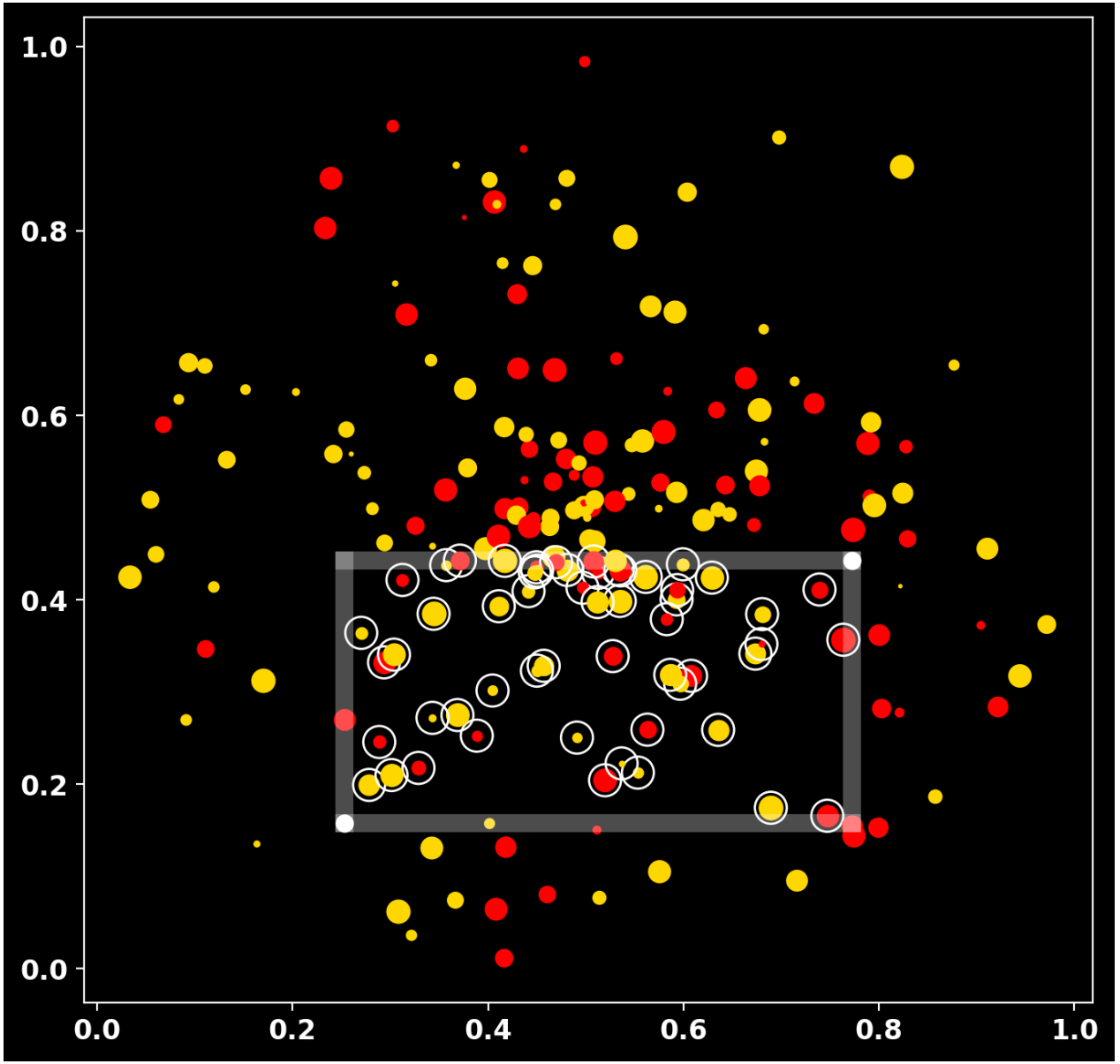
$$Y_L - M * (1 - U_i^{yl}) \leq Y_i$$

$$Y_L + M * (U_i^{yl}) \geq Y_i$$

$$U_i^{xl}, U_i^{xu}, U_i^{yl}, U_i^{yu} \in \{0,1\}$$

$$U_i, X_L, X_U, Y_L, Y_U \in [0,1]$$

Ex40



$$U_i = U_i^{xl} * U_i^{xu} * U_i^{yl} * U_i^{yu}$$

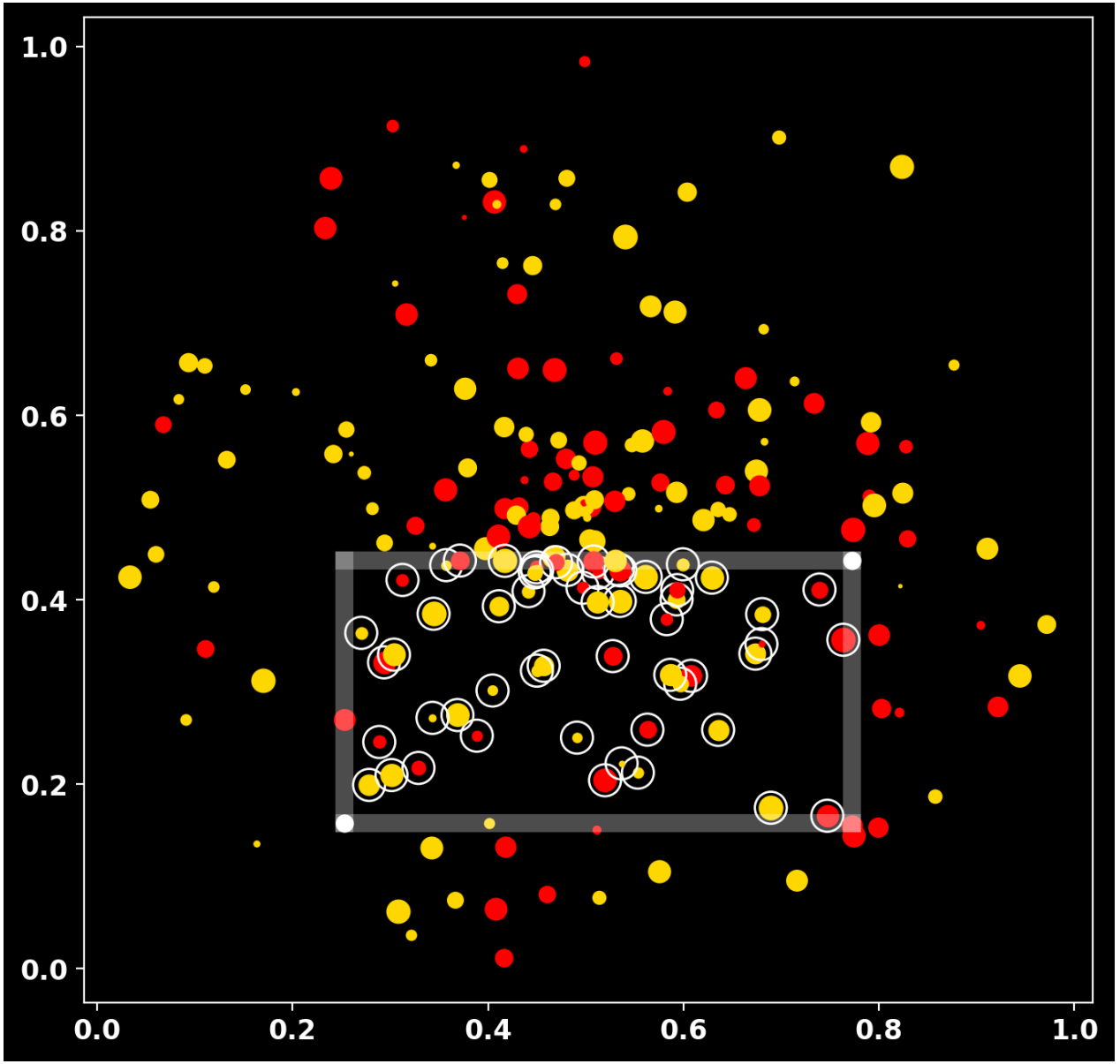
$$U_i \leq U_i^{xl}$$

$$U_i \leq U_i^{xu}$$

$$U_i \leq U_i^{yl}$$

$$U_i \leq U_i^{yu}$$

$$U_i = U_i^{xl} + U_i^{xu} + U_i^{yl} + U_i^{yu} - 3$$



Ex40