Quadratic assignment problems (QAPs) are known to be among the hardest discrete optimization problems. Recent study shows that even obtaining strong lower bounds for QAPs is a computational challenge. In this talk, we first discuss how to construct new simple convex relaxations of QAPs based on various matrix splitting schemes. Then we introduce the so-called symmetric mappings that can be used to derive strong cut for the proposed relaxation model. We show that the bounds based on the new models are comparable to the strongest bounds in the literature. Promising experimental results based on the new relaxations will be reported.