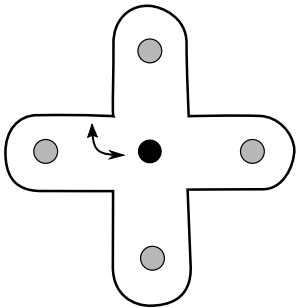
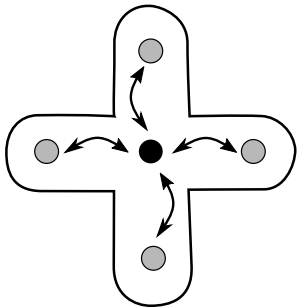
Relatives Dual Graph



$$\mathbf{m}(v \oplus h)$$

$$\mathcal{O}(n)$$

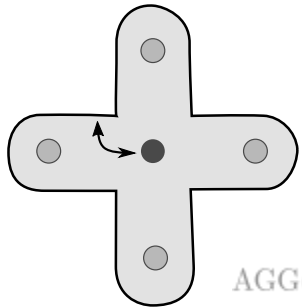
Total Exchange



$$\sum_{v_j \in h} \mathbf{m}(v \oplus h \oplus v_j)$$

$$\mathcal{O}(n^2)$$

Neighborhood Aggregation



$$\mathbf{m}(v \oplus h \oplus \mathbf{AGG}(\{v_j \in h\}))$$

$$\mathcal{O}(n)$$