

Xiong's operator for
quad meshes

Primal
triangulation

Dual
triangulation

$$\Delta(v_i) = \frac{1}{A} * \frac{1}{2} \left[\sum_j w_{ij}(v_i - v_j) + \sum_{j'} w'_{ij}(v_i - v'_{j'}) \right]$$

$$w_{ij} = \frac{1}{2} (\cot \theta_{(j-1)4} + \cot \theta_3) + \frac{1}{2} (\cot \theta_{(j-1)1} + \cot \theta_6)$$

$$w'_{ij} = \cot \theta_{j2} + \cot \theta_{j3}$$

