

Figure 5. Constraint propagation from a fine level (left) to coarser ones. Constrained vertices are shown as (red) squares. The target value of the constraint is marked with a (blue) circle.

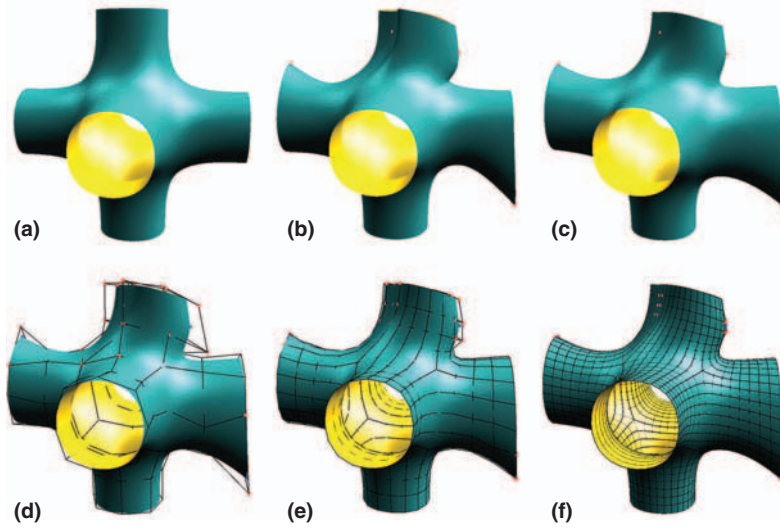


Figure 8. Top: approximating energy minimization. (a) Input model. (b) Fast solution obtained using Catmull-Clark smoothing. (c) Improved solution obtained via multigrid energy minimization. Bottom: (d)-(f) the optimized control mesh and the constraints at levels 2, 3, and 4 during multigrid

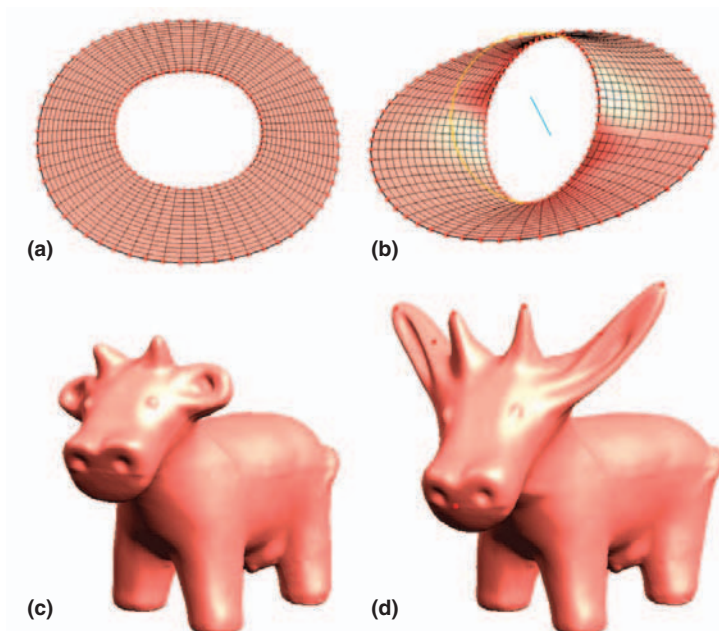


Figure 9. Top: curve constraints along boundary. (a) Input model. (b) Surface after rotating the inner boundary curve and energy optimization (rotation arc and axis are superimposed). Bottom: interactive editing. (c) Input model with details at multiple resolutions. (d) The model in (c) after variational editing. Red points indicate constraints.