

Triangle meshes

Querying meshes

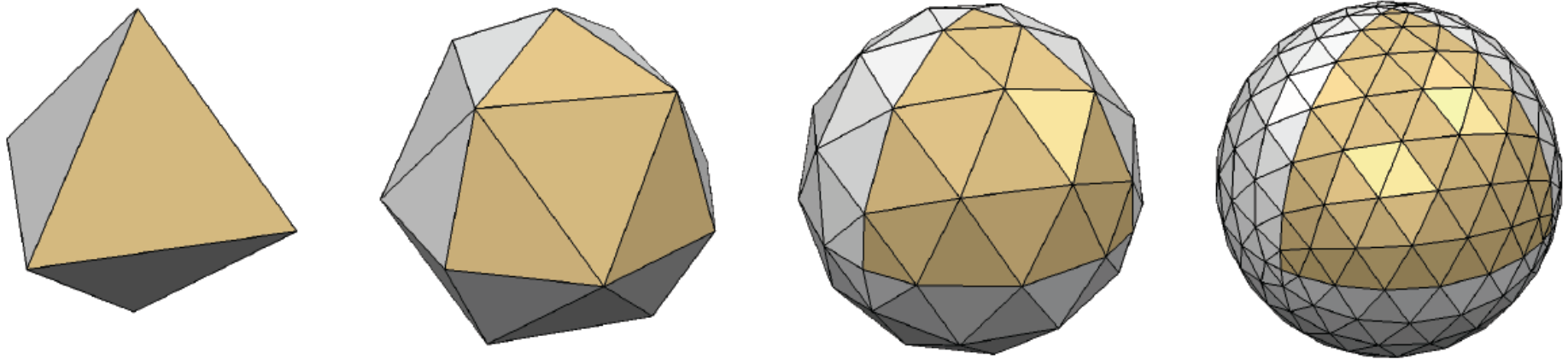
Carlos Andújar

May 2014

Normal/tangent planes

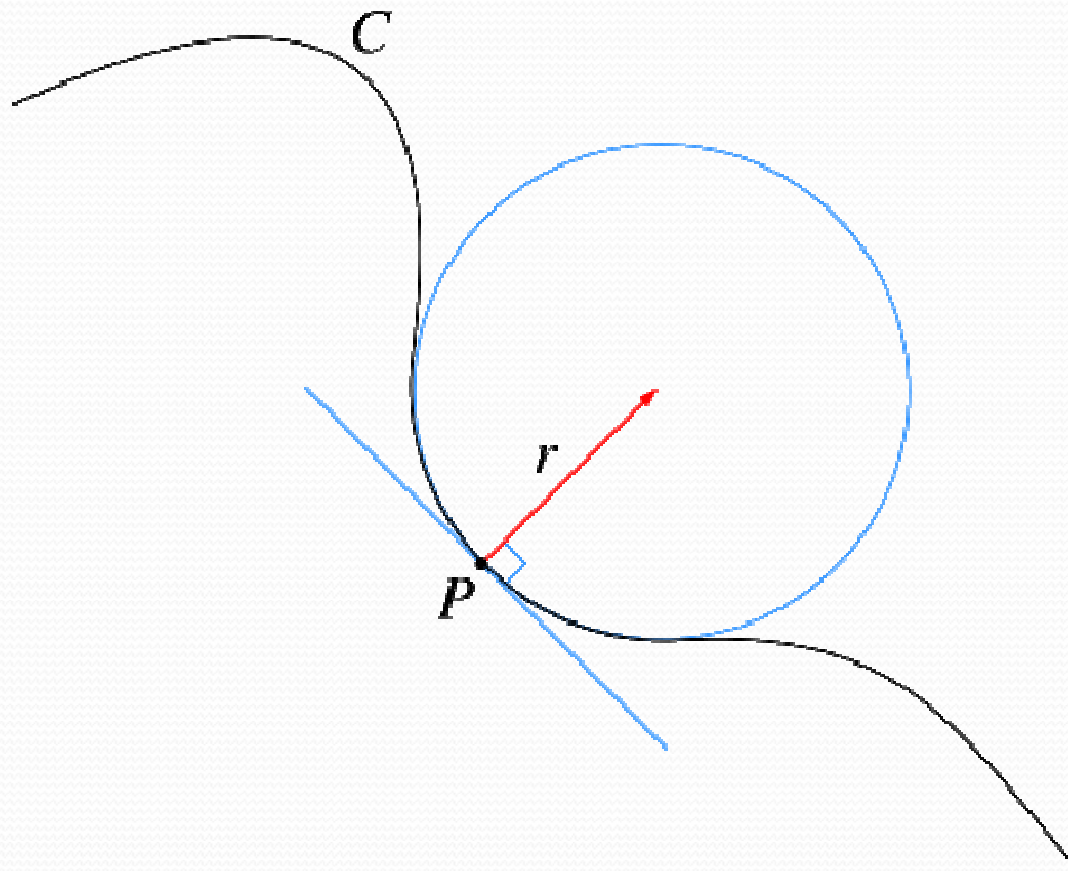
A recurring theme in mesh processing:

The polygons are not the shape: the polygons approximate the surface of the shape.

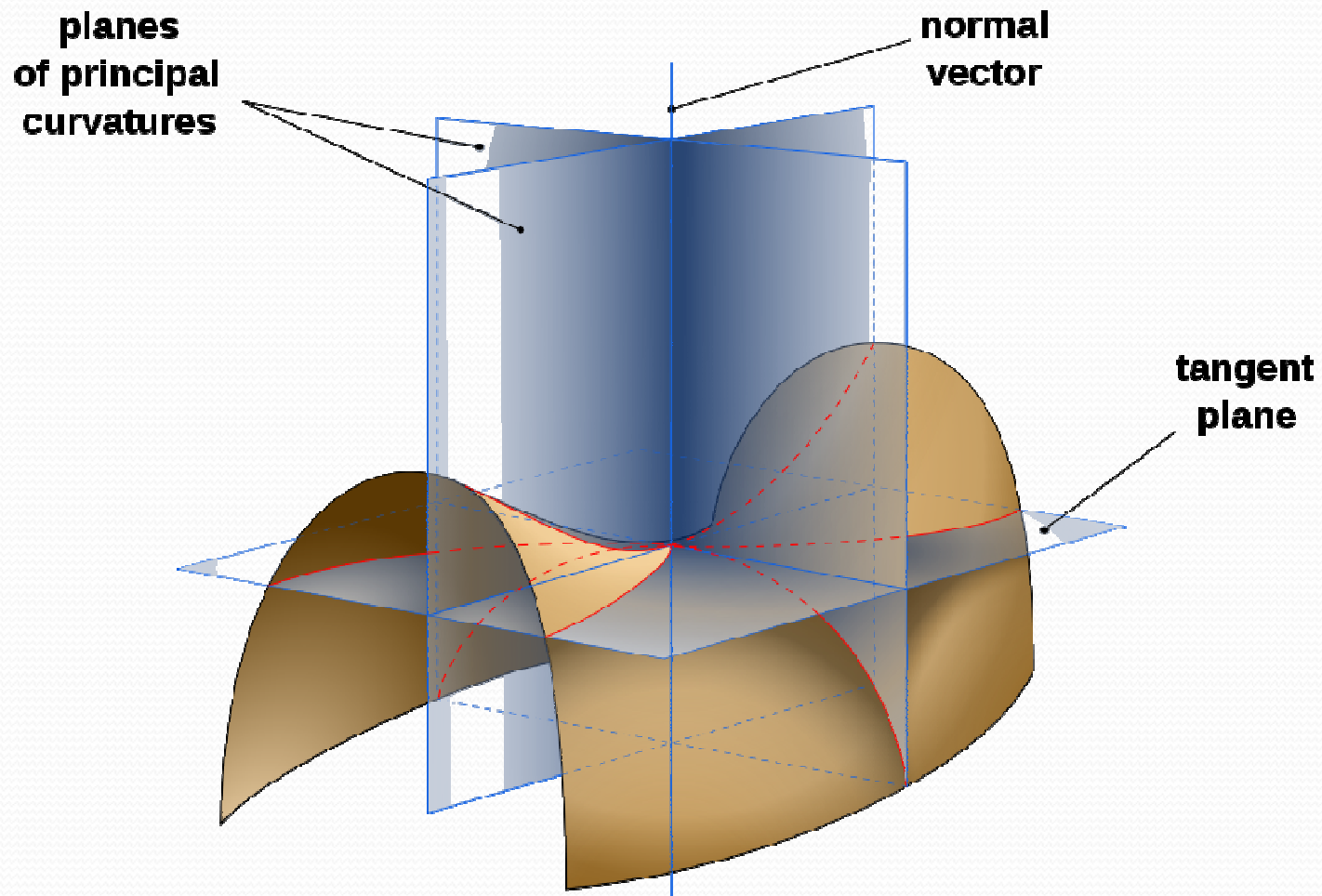


Curvature - curves

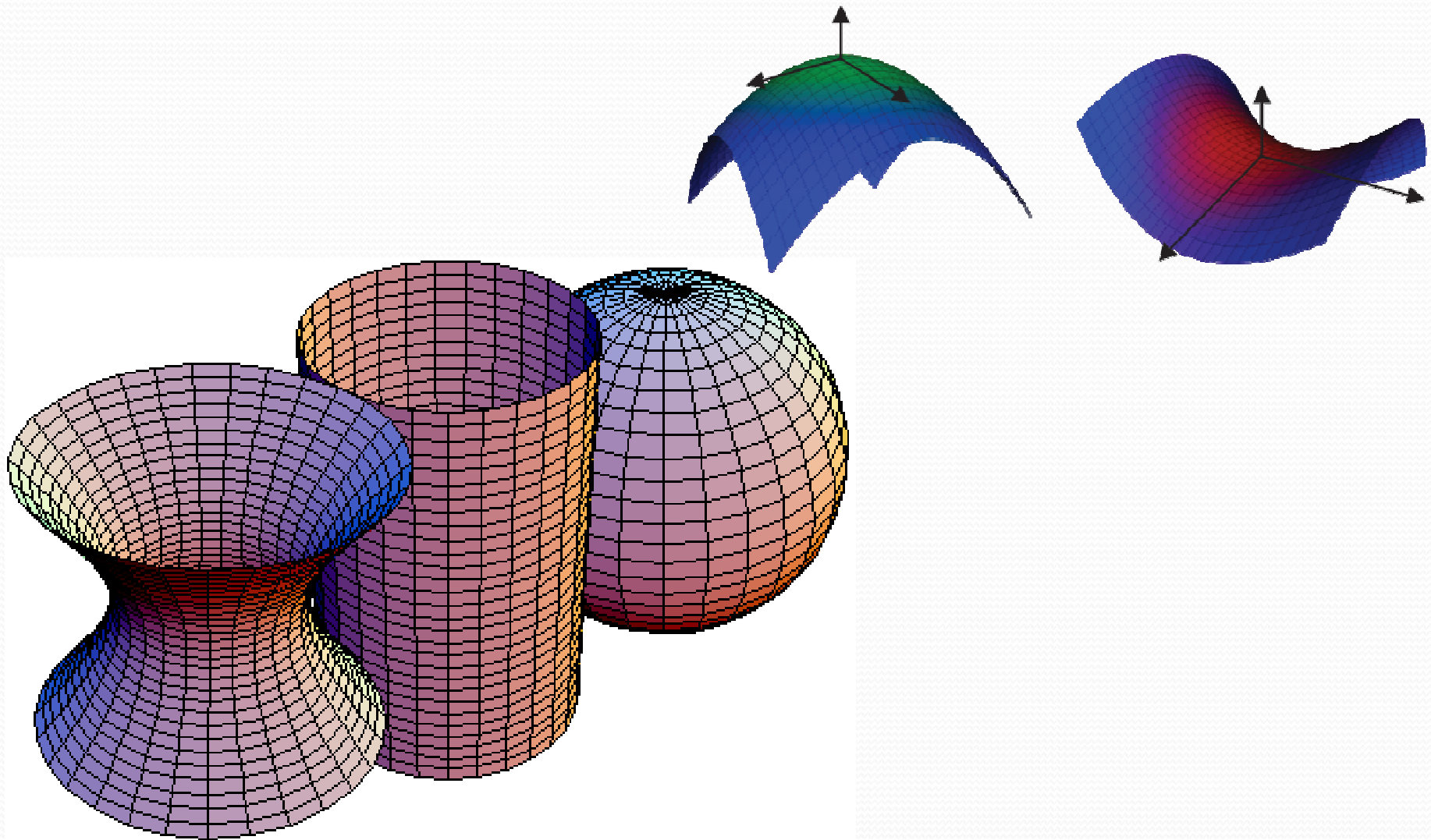
Curvature at a point P on a planar curve



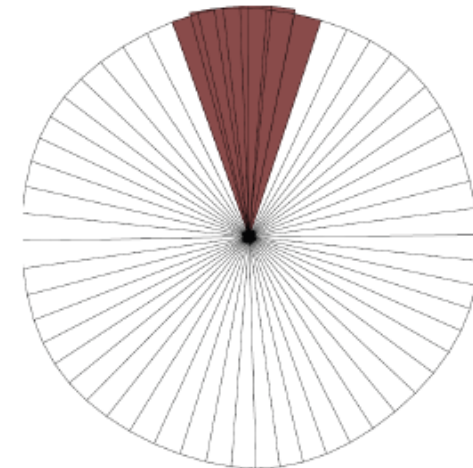
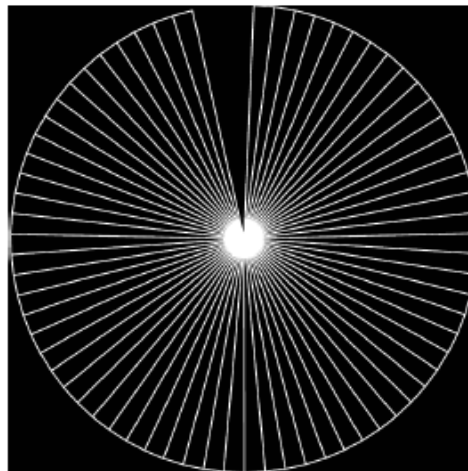
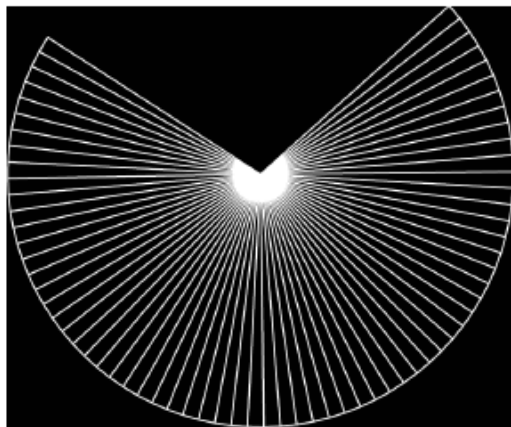
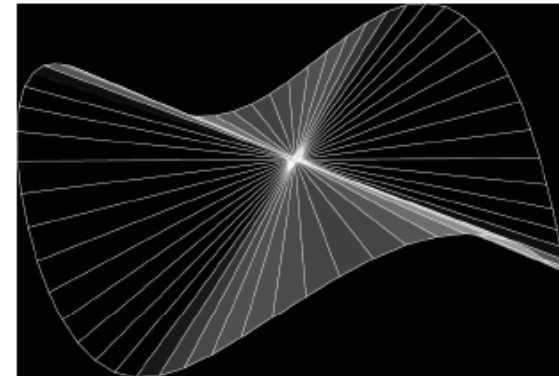
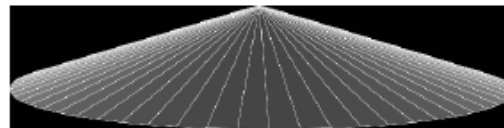
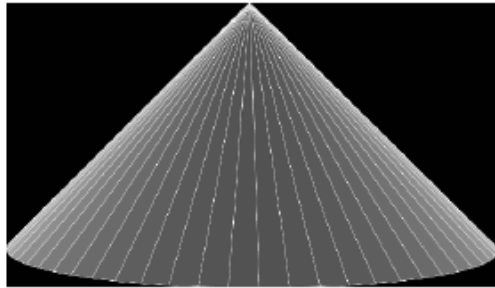
Curvature - surfaces



Curvature - surfaces



Curvature - meshes

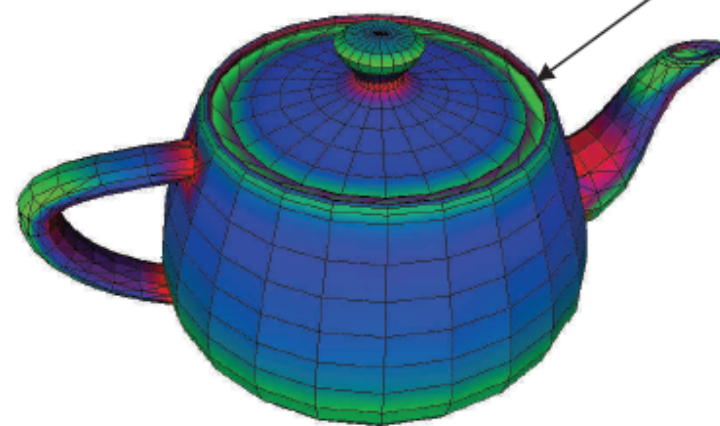
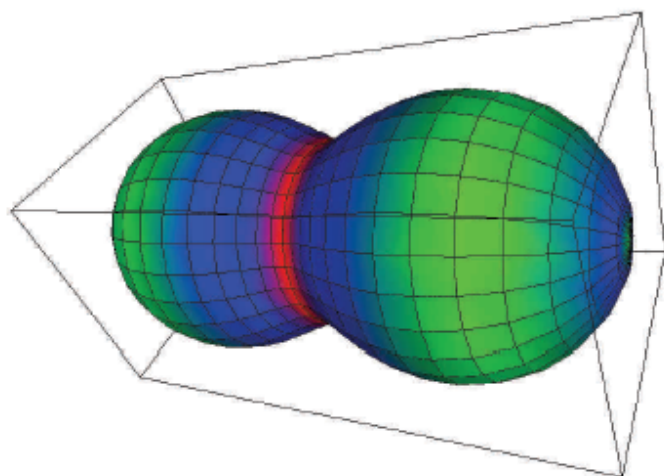
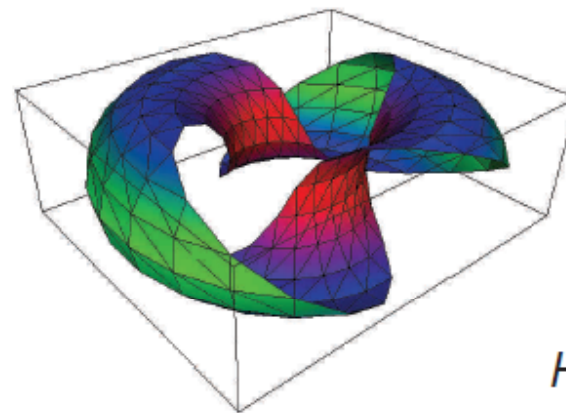
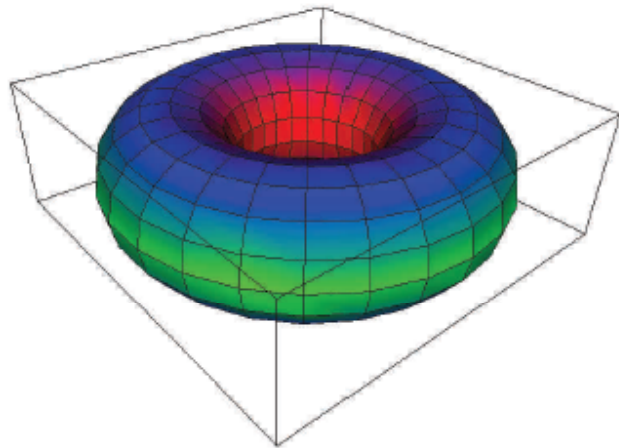


High angle deficit

Low angle deficit

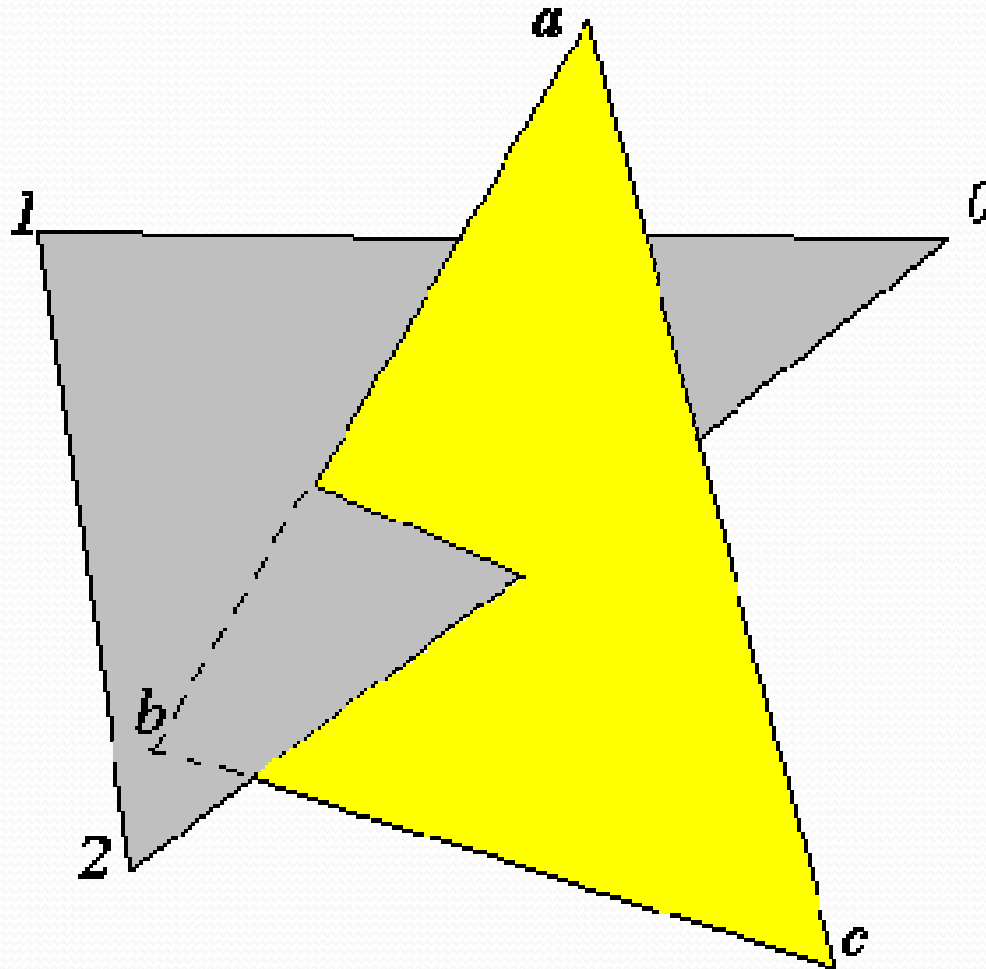
Negative angle deficit

Curvature - meshes



Hmmm...

Edge-triangle intersection



Edge-triangle intersection

