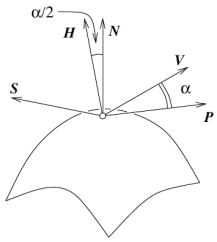
2.2.2

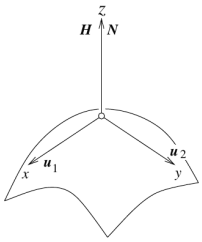
Tuesday, January 2, 2018 6:36 PM

Specularities can give information about color illumination and give hints to the local geometry of a surface.

$$\boldsymbol{N}(x,y) = \frac{1}{\sqrt{1+\kappa_1^2x^2+\kappa_2^2y^2}}\begin{pmatrix}\kappa_1 x\\ \kappa_2 y\\ 1\end{pmatrix},$$

There is no much information to gather on the shape of a specularity, but it is tho possible to predict or distinquish a concave from a convex shape.





A spectacular surface. Right image shows the coordinate system of the spectacular surface. z-axis is in the brighest spot of the surface and the other axes lie along principal directions u_1 and u_2.