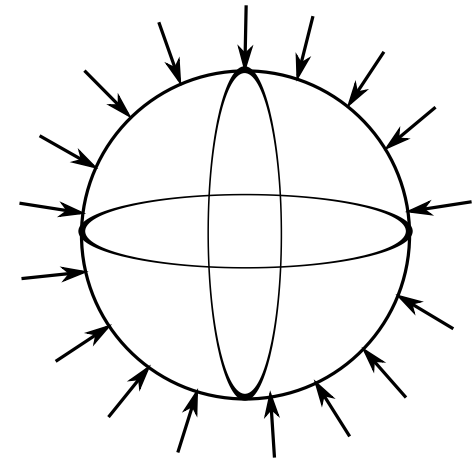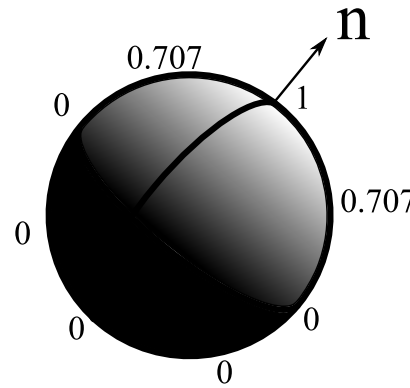Consider the image intensity as a function of the normal of the corresponding object patch...

convolved with...

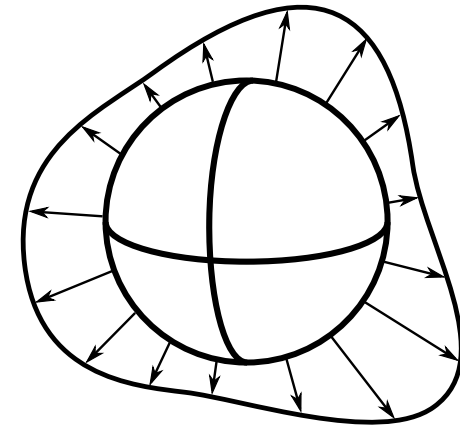Illumination Function

Lambertian reflectance kernel

Image intensity by normal

This is a lowpass filter!

The set of possible image intesity functions gets projected onto a subspace!