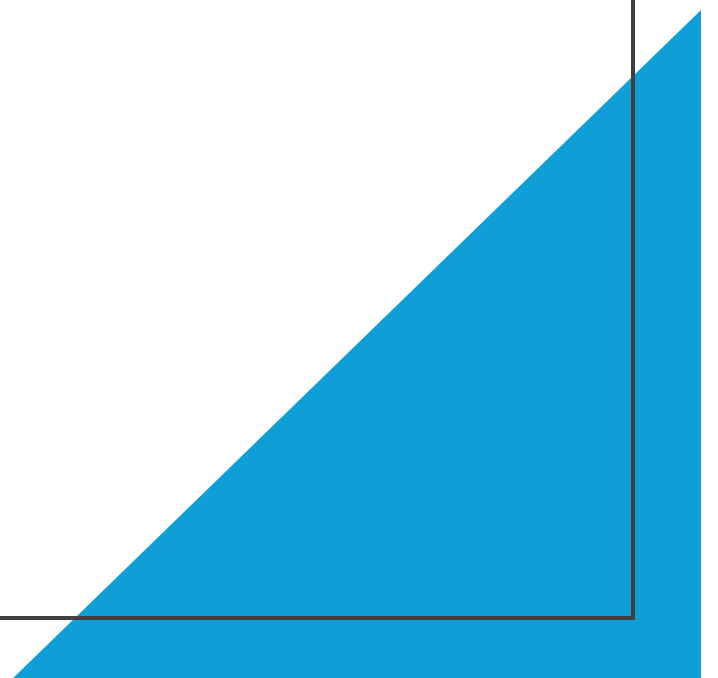
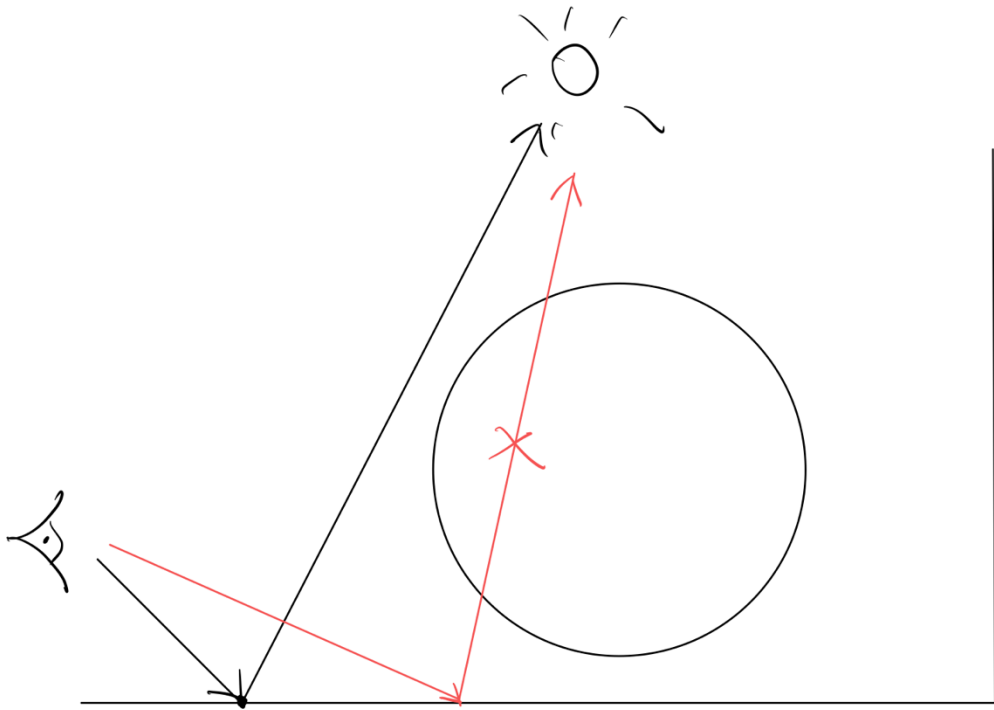


# USI Autumn Semester Project Presentations -- Computer Graphics

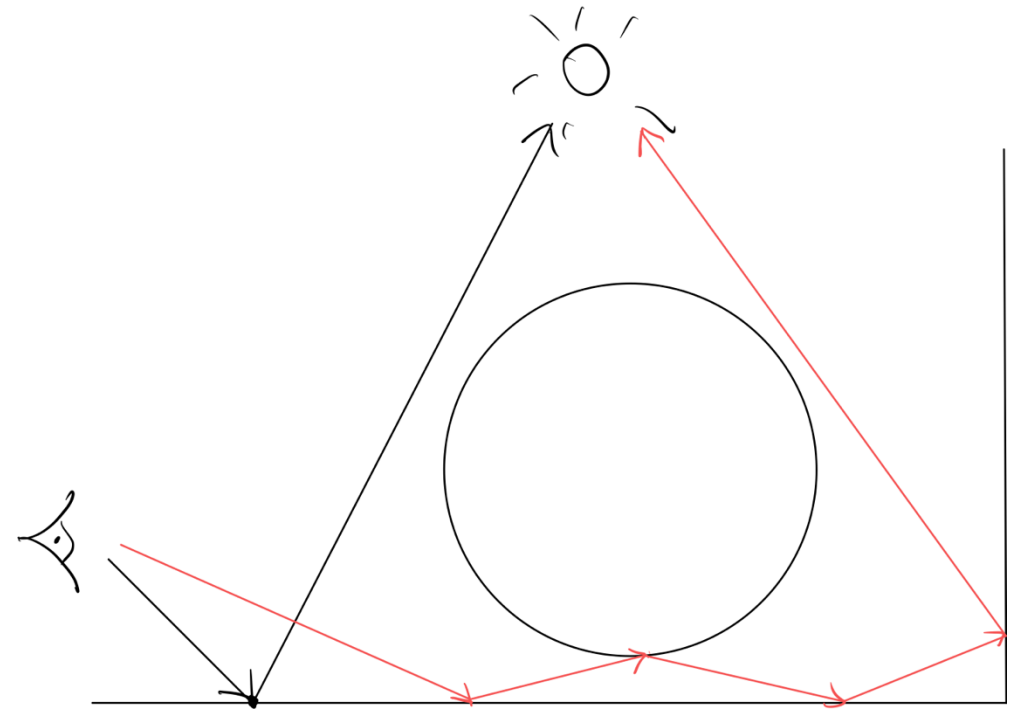
Zhengtao Gao



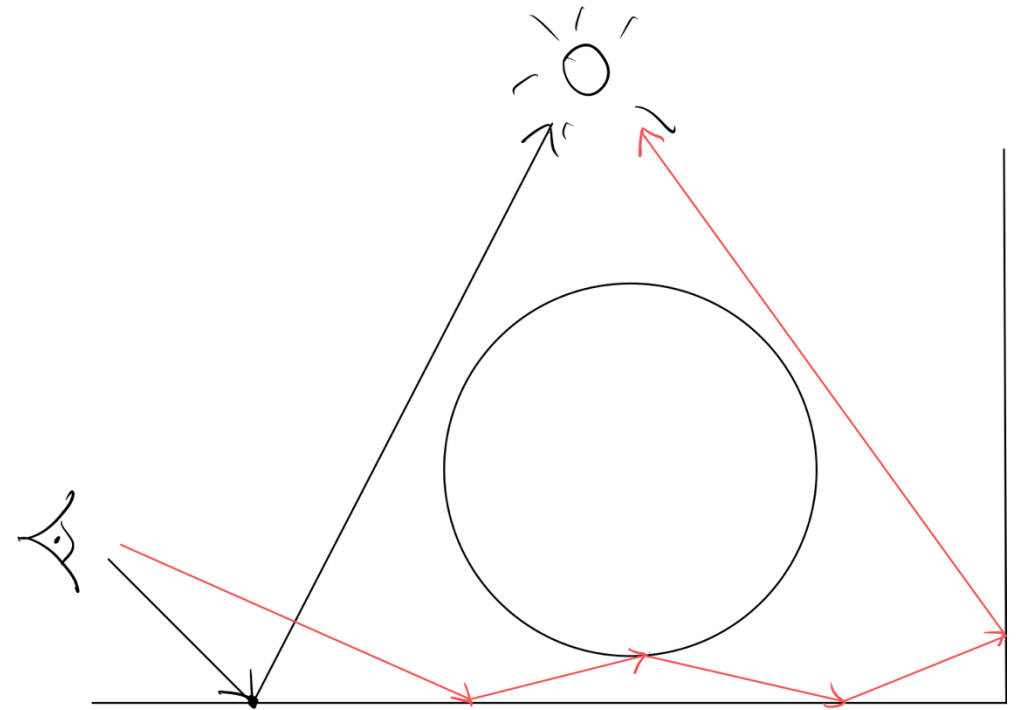
# Local Illumination vs Global Illumination



Phong's Model



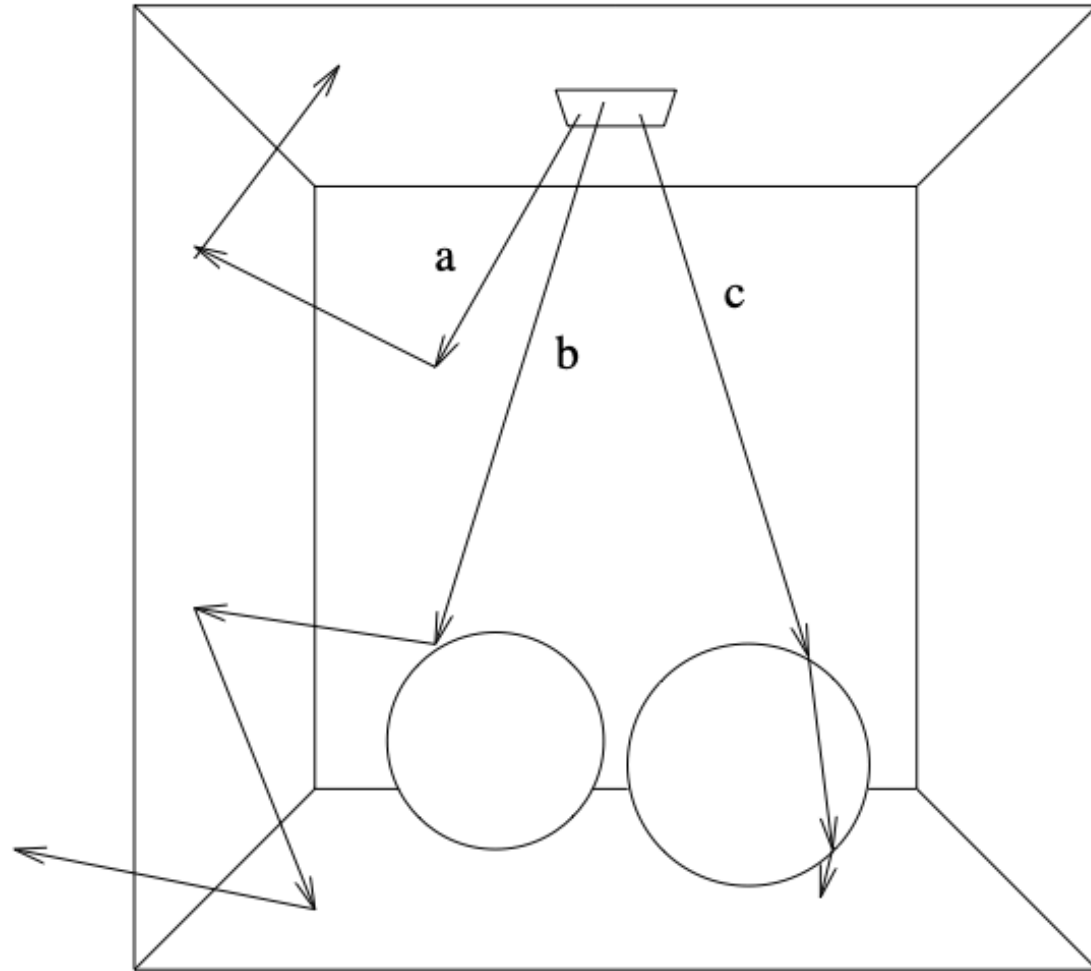
# Local Illumination vs Global Illumination

[illegible]

# Photon Mapping as an extension

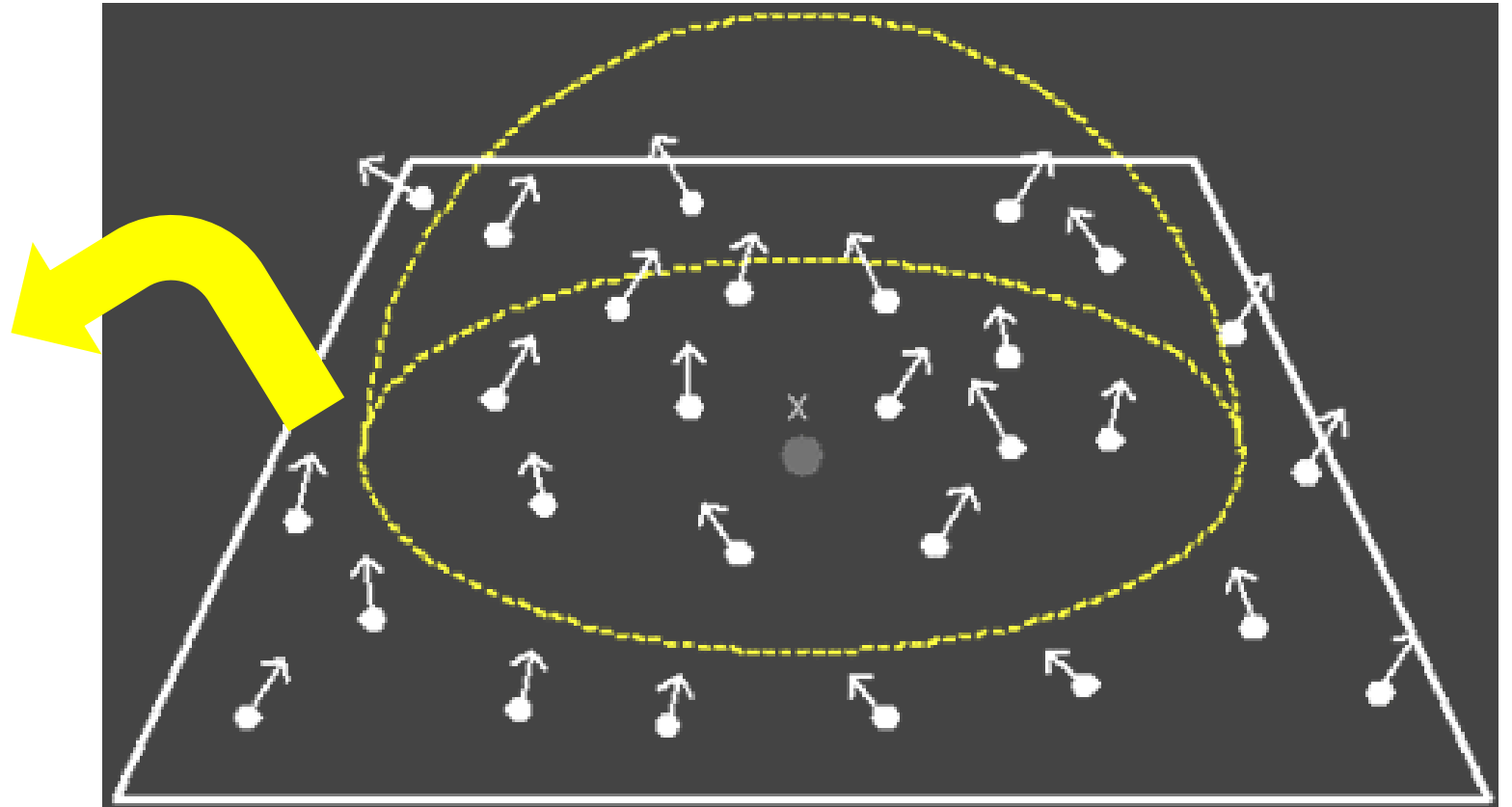
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- Emit Photons
- Trace Photons
- Store Photons

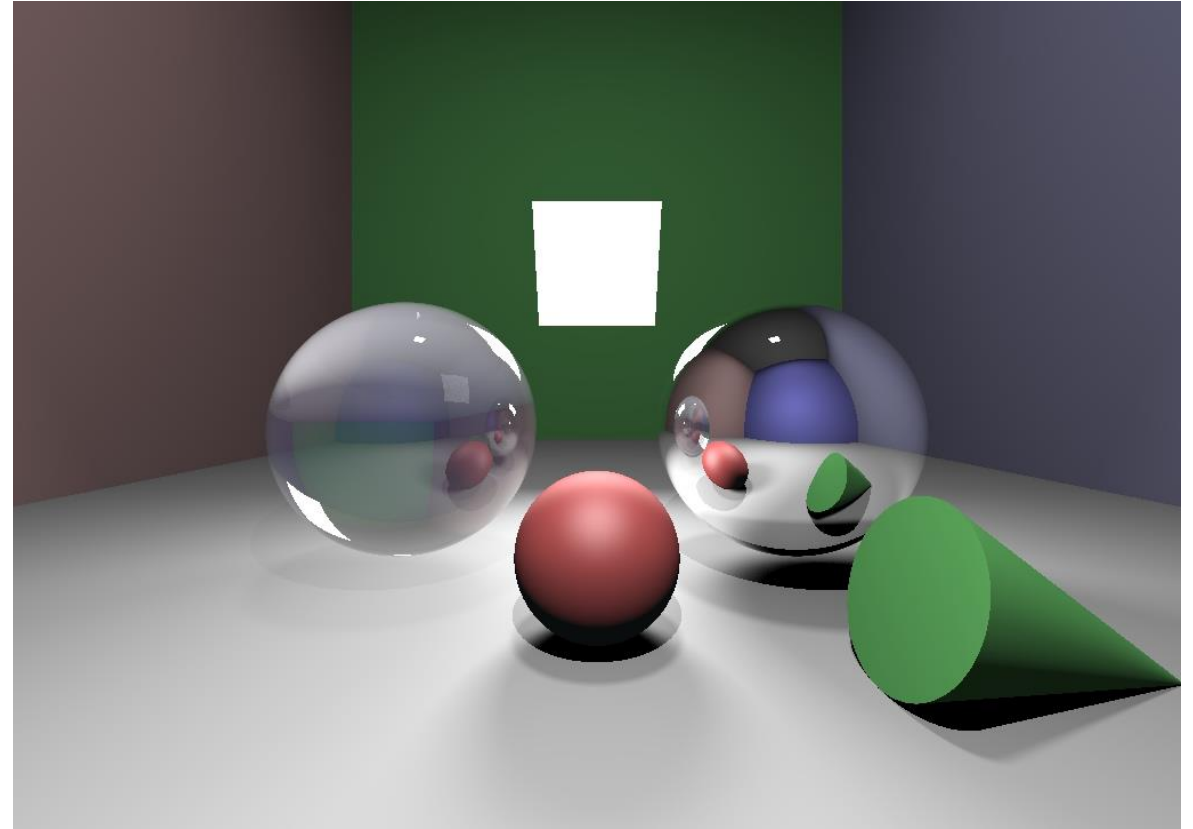
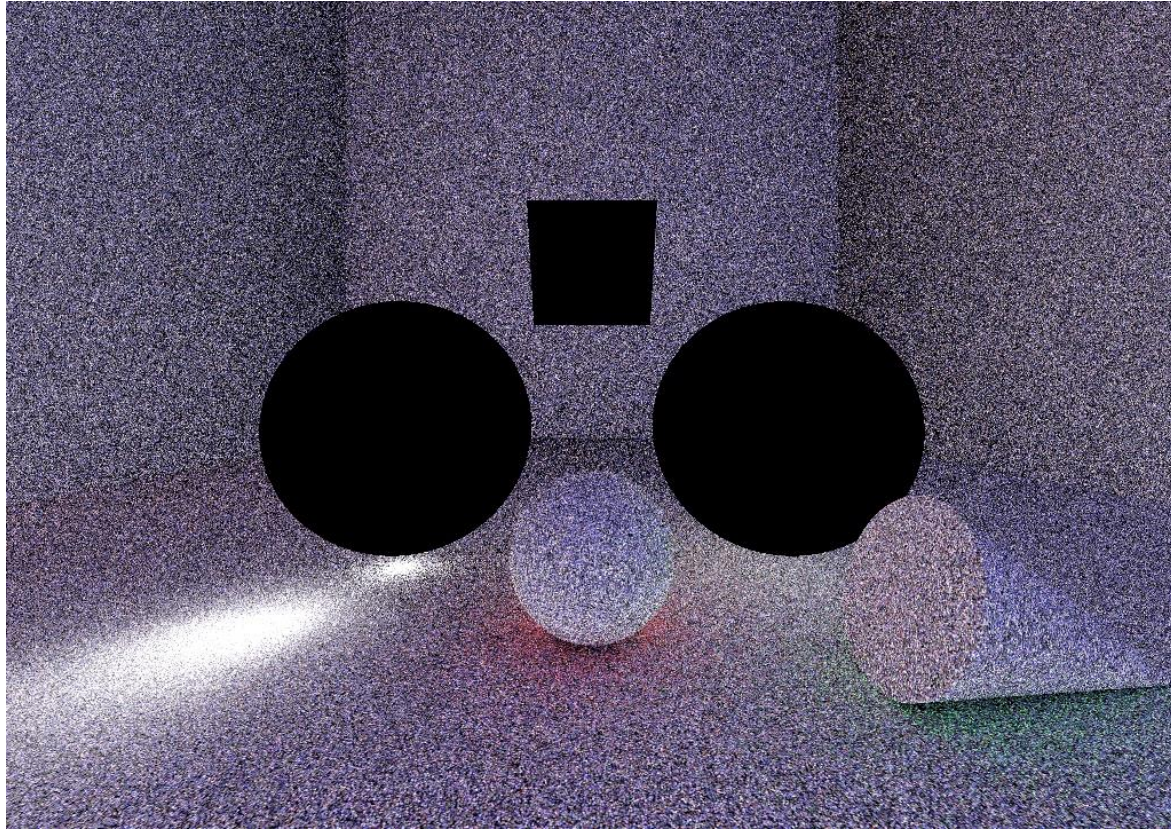


# Photon Mapping as an extension

$$L = L_{\text{phong model}} + L_{\text{photon}}$$

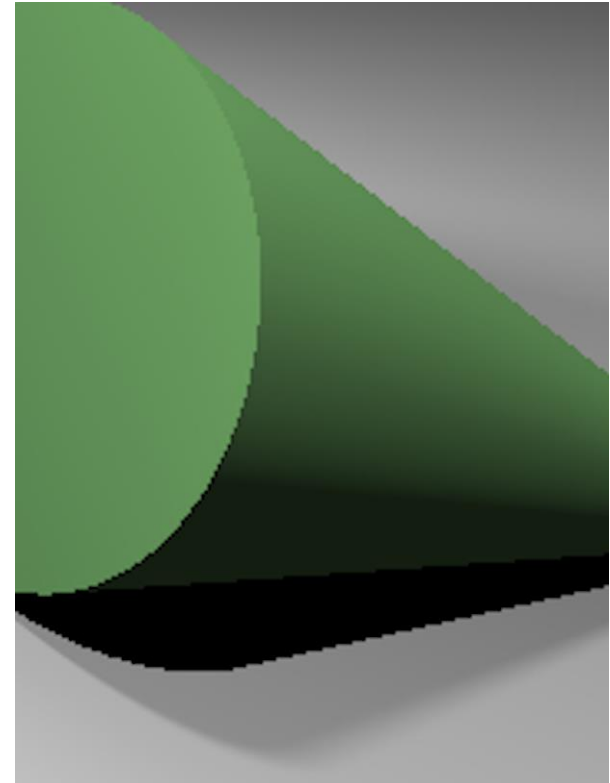
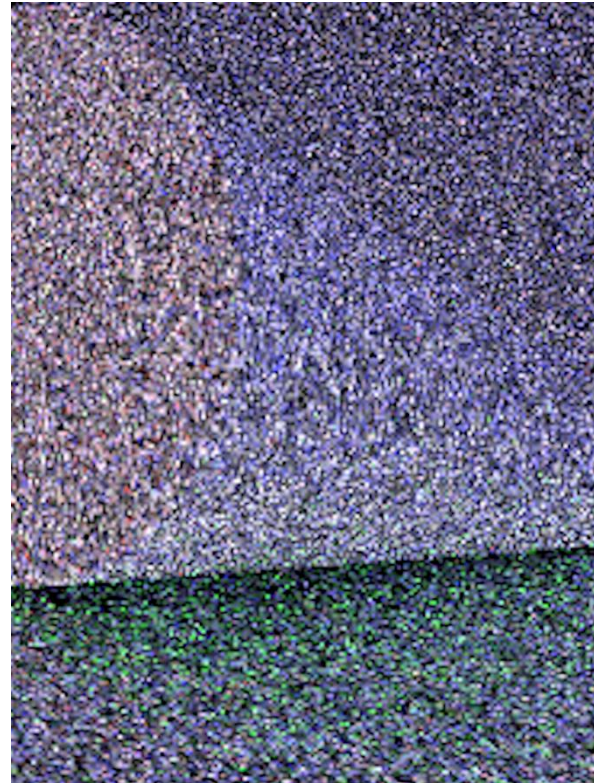
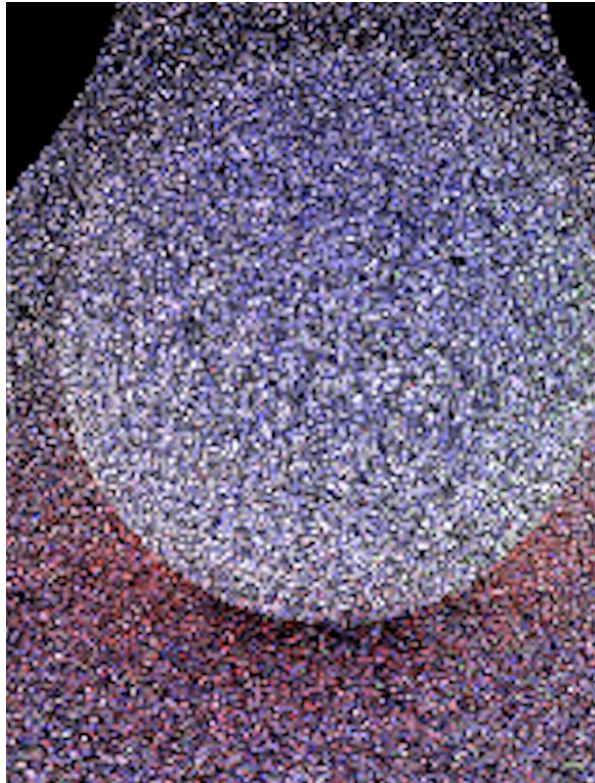
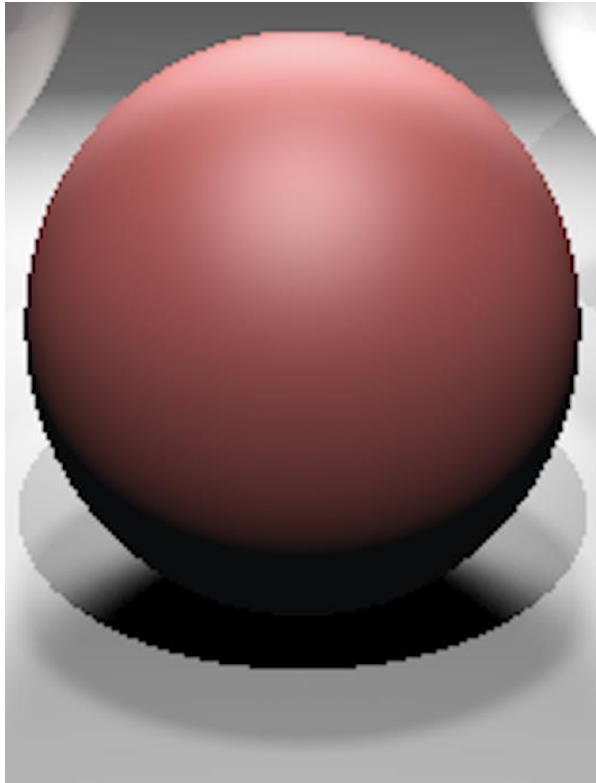


# Photons Visualization

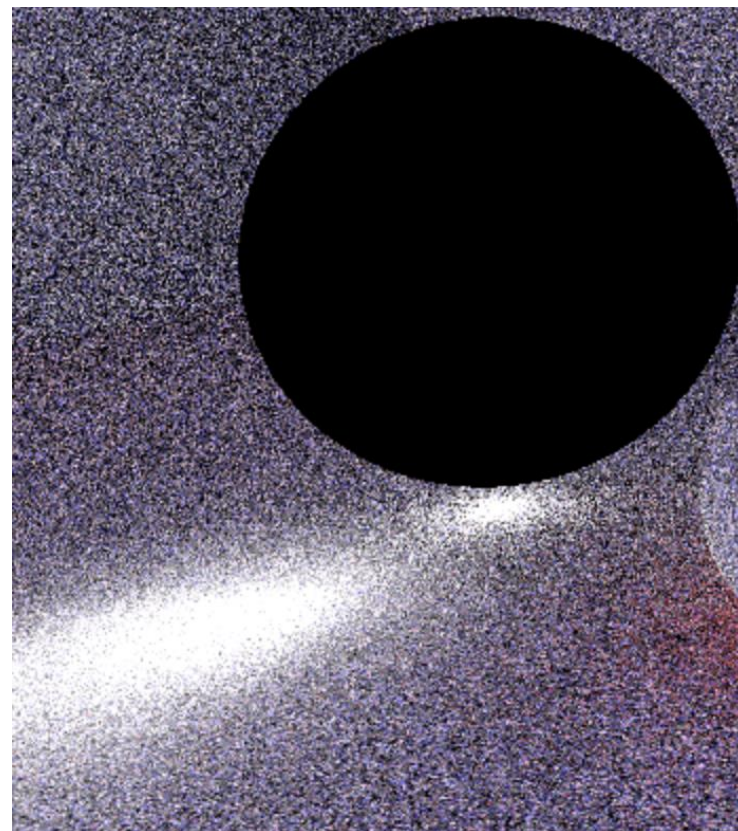
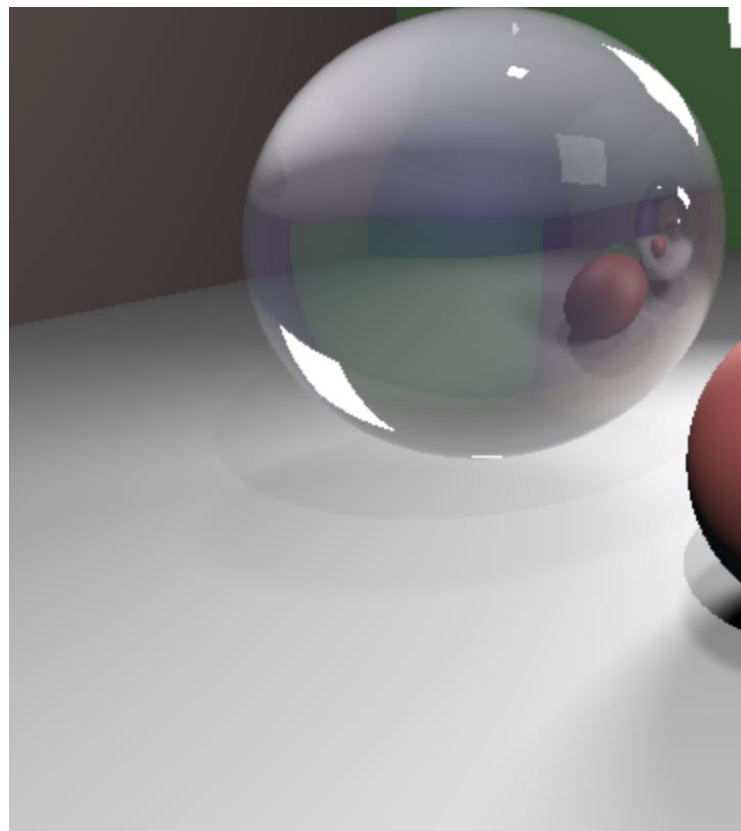




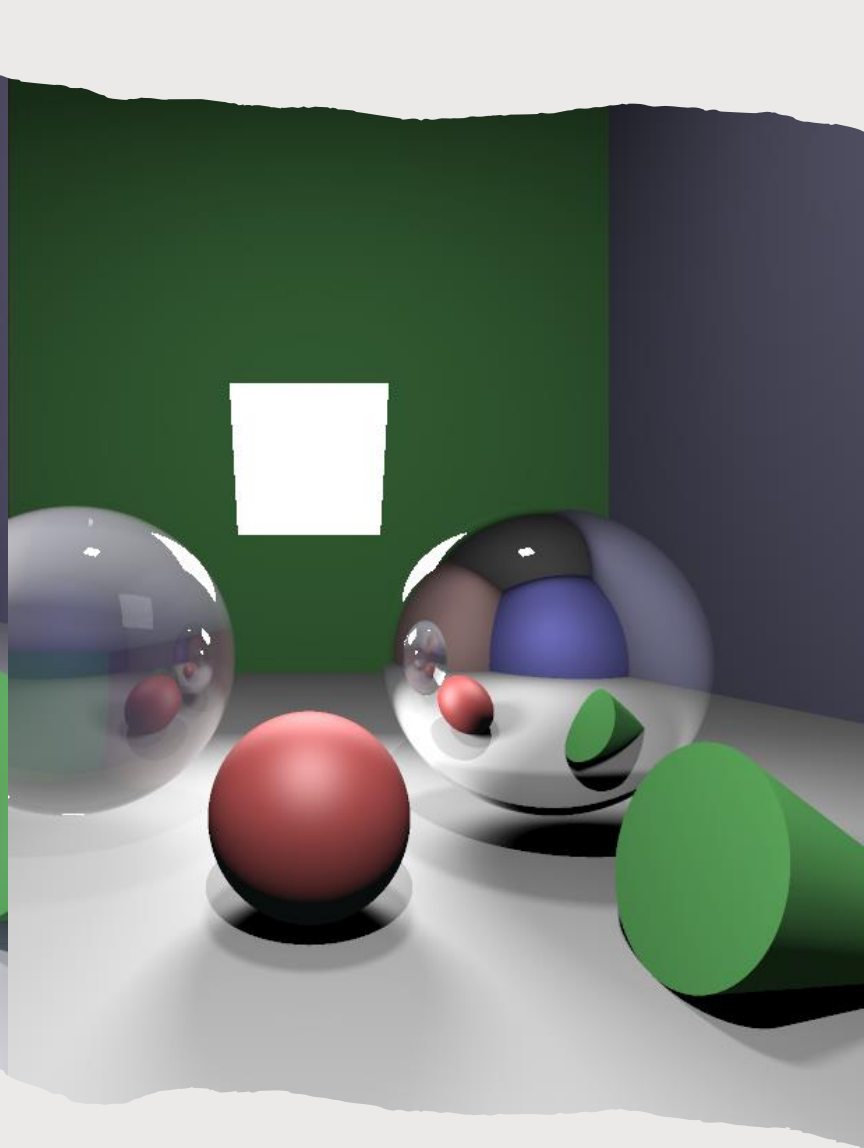
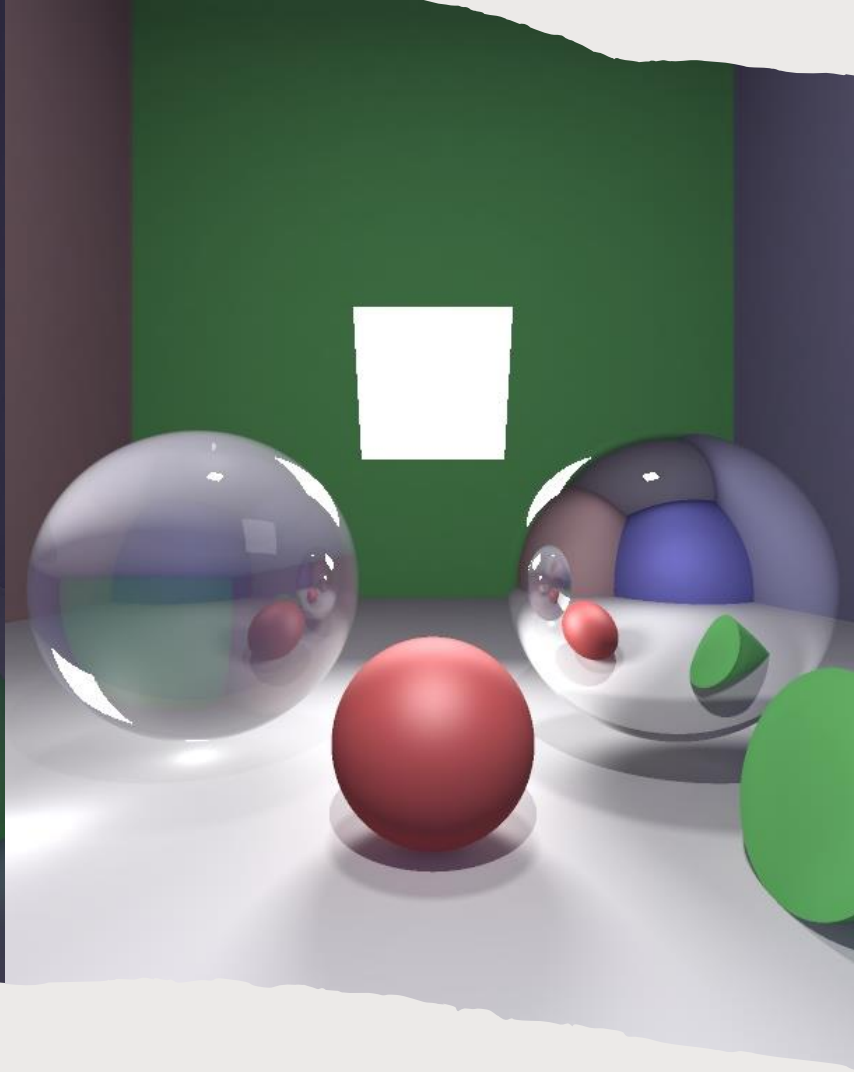
# Indirect Light



# Caustic

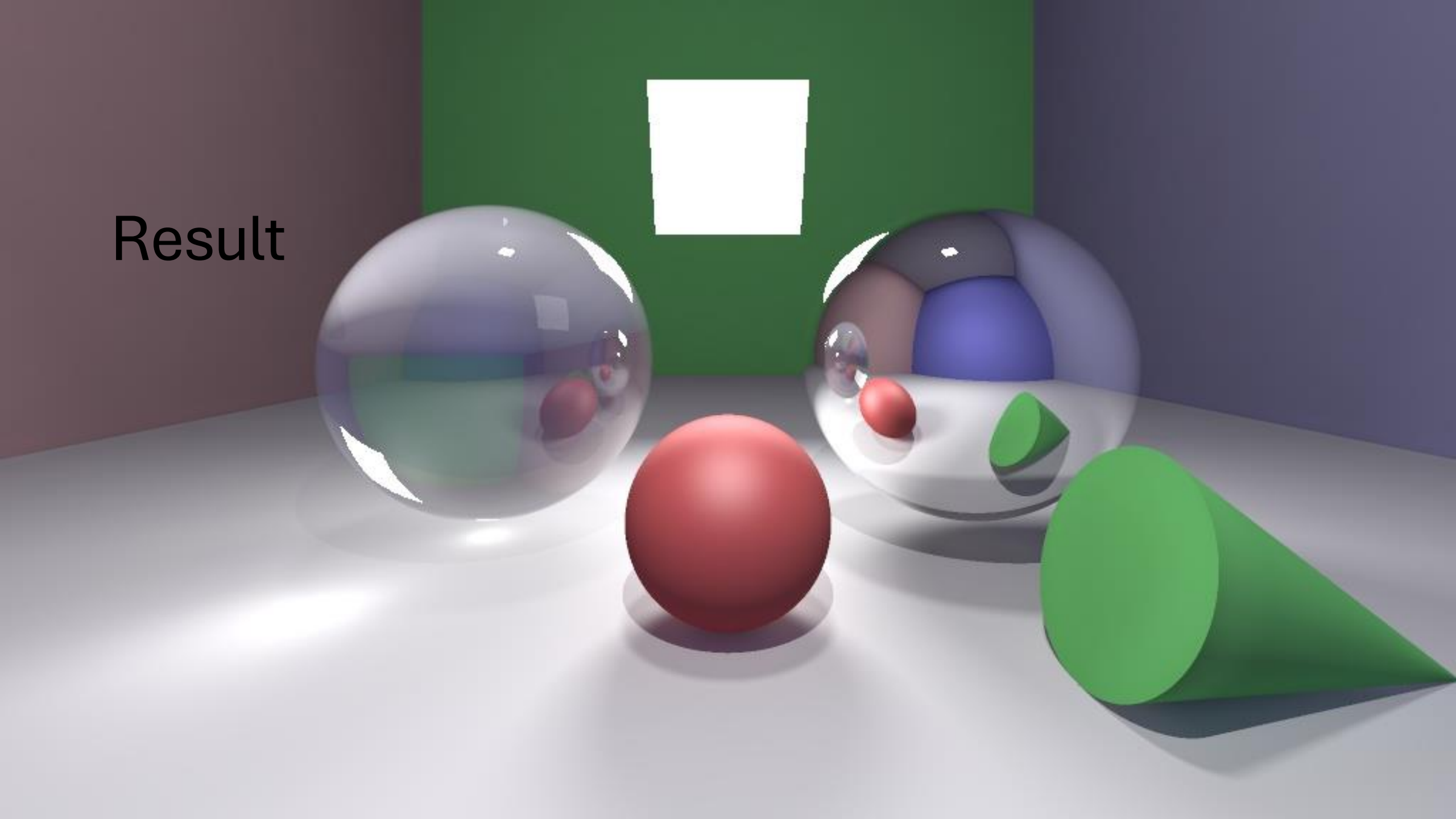


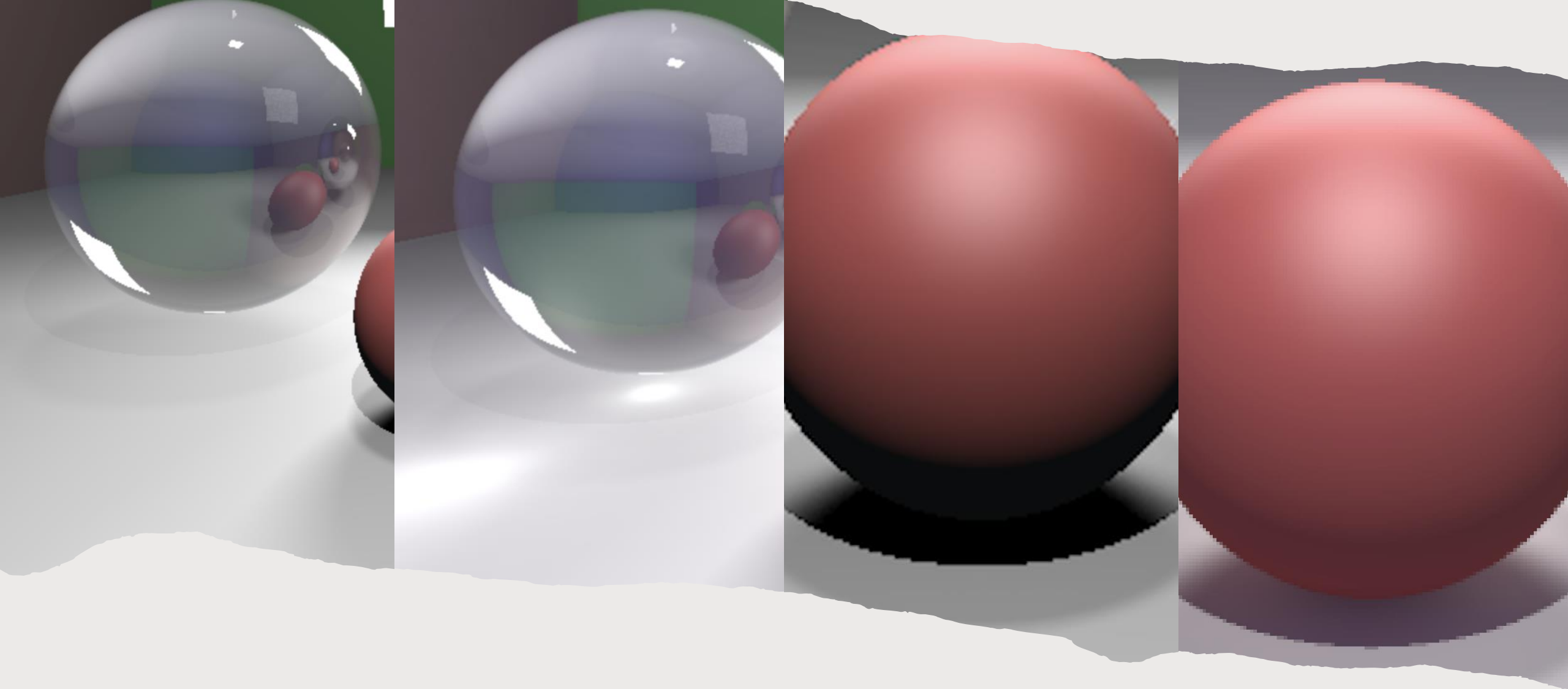




Rendering

Result





Global Illumination & Caustic