

Diffraction Shader

Michael Single

7. Oktober 2013

1 Abstract

2 Introduction

3 Previous Work

4 Theory

4.1 formulas

The following formulas have been used in order to perform the derivations
tell what i mean

$$\psi_2 = \frac{ike^{ikR}}{4\pi R} (Fv - p) * \int_S ne^{ikvs} \quad (1)$$

explain me

$$\begin{aligned} L_\lambda(\omega_r) &= \int_{\Omega} BRDF_\lambda(\omega_i, \omega_r) L_\lambda(\omega_i) \cos(\theta_i) d\omega_i \\ &= xyz \\ &= t \end{aligned}$$

4.2 derivation

$$\begin{aligned} L_{\lambda}(\omega_r) &= \int_{\Omega} BRDF_{\lambda}(\omega_i, \omega_r) L_{\lambda}(\omega_i) \cos(\theta_i) d\omega_i \\ &= \int_{\Omega} BRDF_{\lambda}(\omega_i, \omega_r) L_{\lambda}(\omega_i) \cos(\theta_i) d\omega_i \\ &= t \end{aligned}$$

5 Implementation

6 Experiment

7 Evaluation

8 Results

9 Conclusion

10 Future Work