



**Prof. Dr.-Ing. Ralf Steinmetz**  
Multimedia communications Lab  
Dr. Florian Mehm  
Dipl. Inf. Robert Konrad



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

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### **Example Problems for Lecture 7 „Physically-based Rendering“**

#### **1. Important Topics**

Different kinds of lights

Input and output of a BRDF

Diffuse and Specular

Fresnel Effect

The Microfacet Model

Image Based Lighting

#### **2. Example Problems**

- a) List the different kind of lights used in computer graphics and compare them to real lights.
- b) Explain diffuse light reflection.
- c) The Fresnel effect gets stronger based on which value?
- d) Which data structures are used for image based lighting in realtime graphics?
- e) What properties do the facets have to fulfill that add light to the rendered image in a microfacet model?