



Lecture 24:

Wrap-Up

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Ray - Tracing

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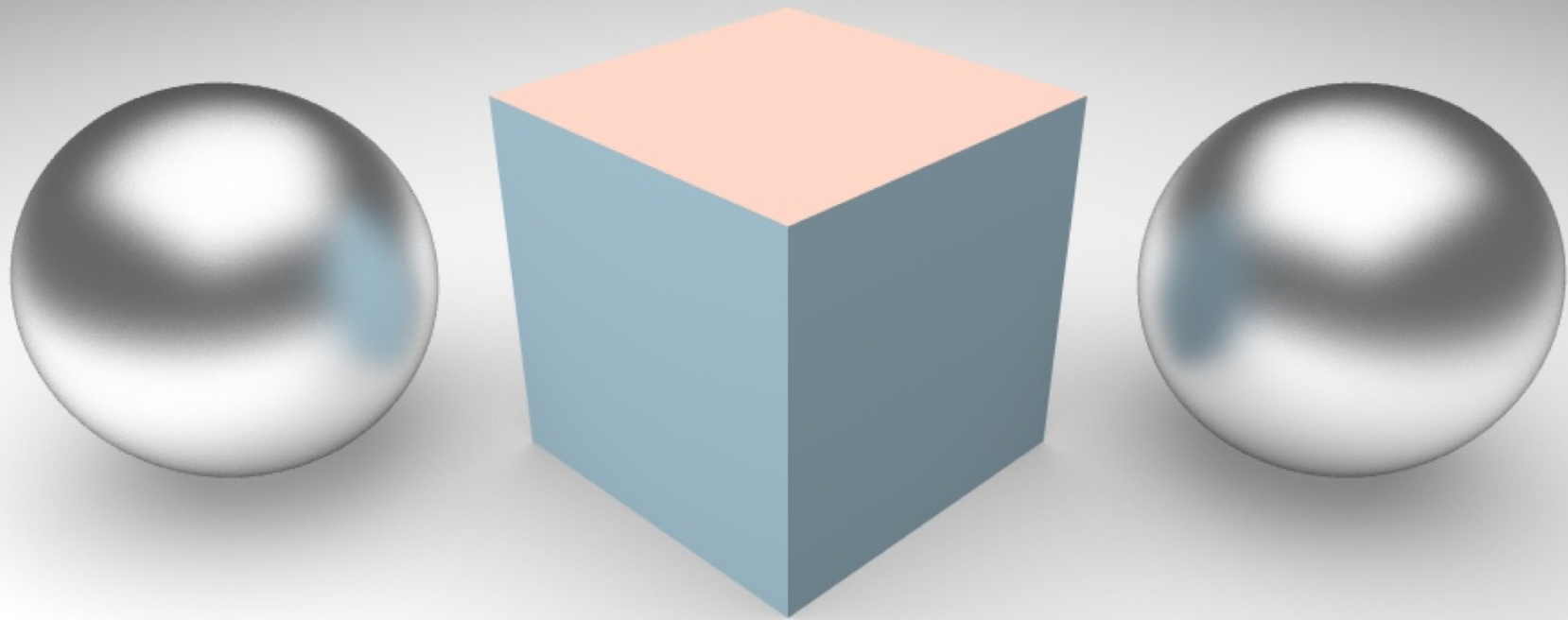
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Software Ray-Tracing

- A good basis for your future software
- OpenRT library : <https://github.com/Project-10/OpenRT>
 - You are really welcome to experiment with and contribute to
 - Will be used for the CG lectures next years



Artificial Virtual Reality

- Concentration on creation new [environment cameras](#), physically-correct cameras
- Emulation of real-world lenses and camera sensors ([bayer filter](#))
- Possible future master work in “6-Degrees-of-Freedom (6DoF)
- Link: <https://research.fb.com/wp-content/uploads/2019/09/An-Integrated-6DoF-Video-Camera-and-System-Design.pdf>

Subsurface scattering / Subsurface light transport (SSLT)

- Concentration on creation of new **shaders**
- Materials as wax, skin, marble, *etc.*
- Link: https://en.wikipedia.org/wiki/Subsurface_scattering

Global Illumination Techniques

- Concentration on creation new **light sources** and **light propagation techniques**
- Implementation and optimization of algorithms as Ambient Occlusion, Photon Mapping, *etc.*
- Link: https://en.wikipedia.org/wiki/Subsurface_scattering



Assessment

- Type: Written Examination
- Date and Place: 20.12.2019 / 9:00 – 11:00 / SCC - Hall 4
 - Please be half an hour earlier
- Duration: 120 min
- Weight: 100%
- Closed book exam

Admission:

- The list of admitted students will be published in the beginning of the next week