#### Lab Sessions **Photorealistic Rendering** (Advanced Computer **Graphics**)

Tobias Isenberg (informatics mathematics





























## Results (previous years)



#### **Results (previous years)**





## **Results (previous years)**





#### **Interesting errors**



# **Raytracer: assignment 6**

- at least one additional geometry type
  - make sure triangles are part of the list you have implemented



# **Raytracer: assignment 6**

- at least one additional geometry type
  - make sure triangles are part of the list you have implemented
- mesh loading and rendering



# **Raytracer: assignment 6**

- at least one additional geometry type
  - make sure triangles are part of the list you have implemented
- mesh loading and rendering
- bonus: CSG



# Final assignments (10 points each)

- implement refraction
- implement bump-mapping
- change your implementation to process in parallel to speed-up the raytracing computation







- bonus ideas:
  - still possible

# **Raytracer: Additional bonus tasks**

- Exposure time (motion blur)
- Soft shadows
- Lens flare
- Optimizations (reduction of the number of rays or number of objects to do intersection tests on)
- Parallelization
- Non-Photorealistic Rendering (NPR)



# **Further meetings**

- final lecture + practical session: Feb. 7
- backup teaching slot: Feb. 14
  - $\rightarrow$  presentations of final tasks (if completed) and your bonus
  - nothing fancy, just show off the final tasks and any extras you did
  - few slides with images, discuss what's cool, what went wrong, ...
  - 5–10 minutes per team (tell me if you want more)
  - feedback for class also ok
  - questions if there are any
- exam: on February 21
- final deadline for assignments (final tasks, bonuses): Feb. 26

#### **Presentation: Show off cool results**

 $\rightarrow$  and please send me the best image or two per group for my gallery page



