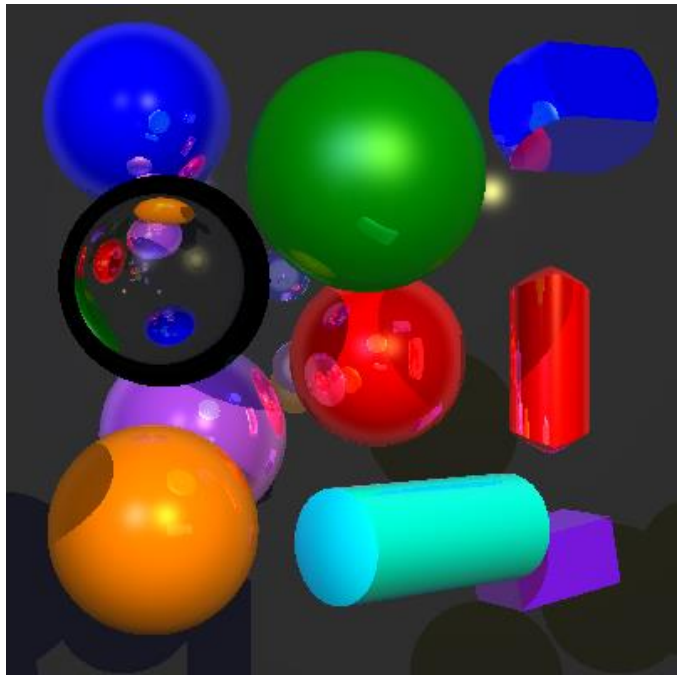
Lab Sessions

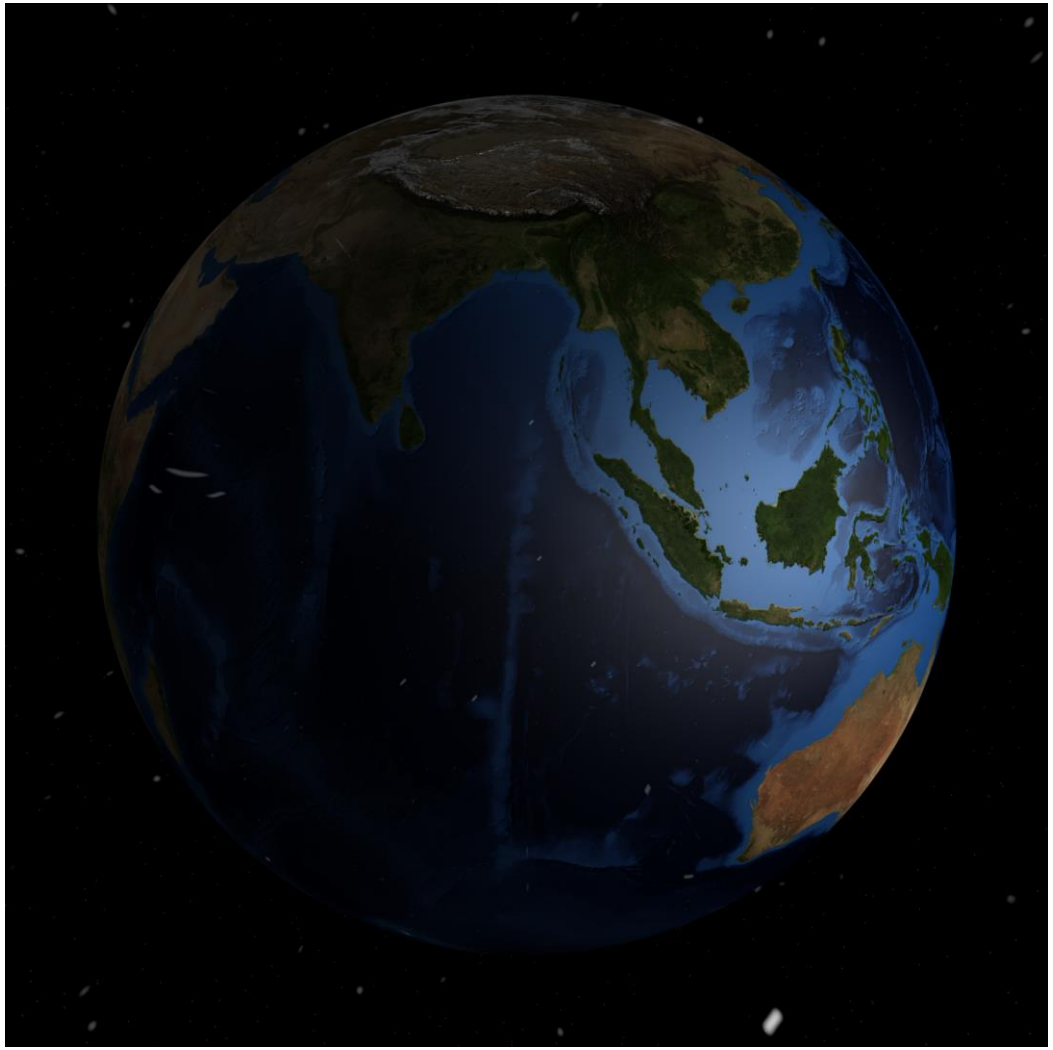
# Photorealistic Rendering (Advanced Computer Graphics)

Tobias Isenberg

informatics mathematics Inria



# Results



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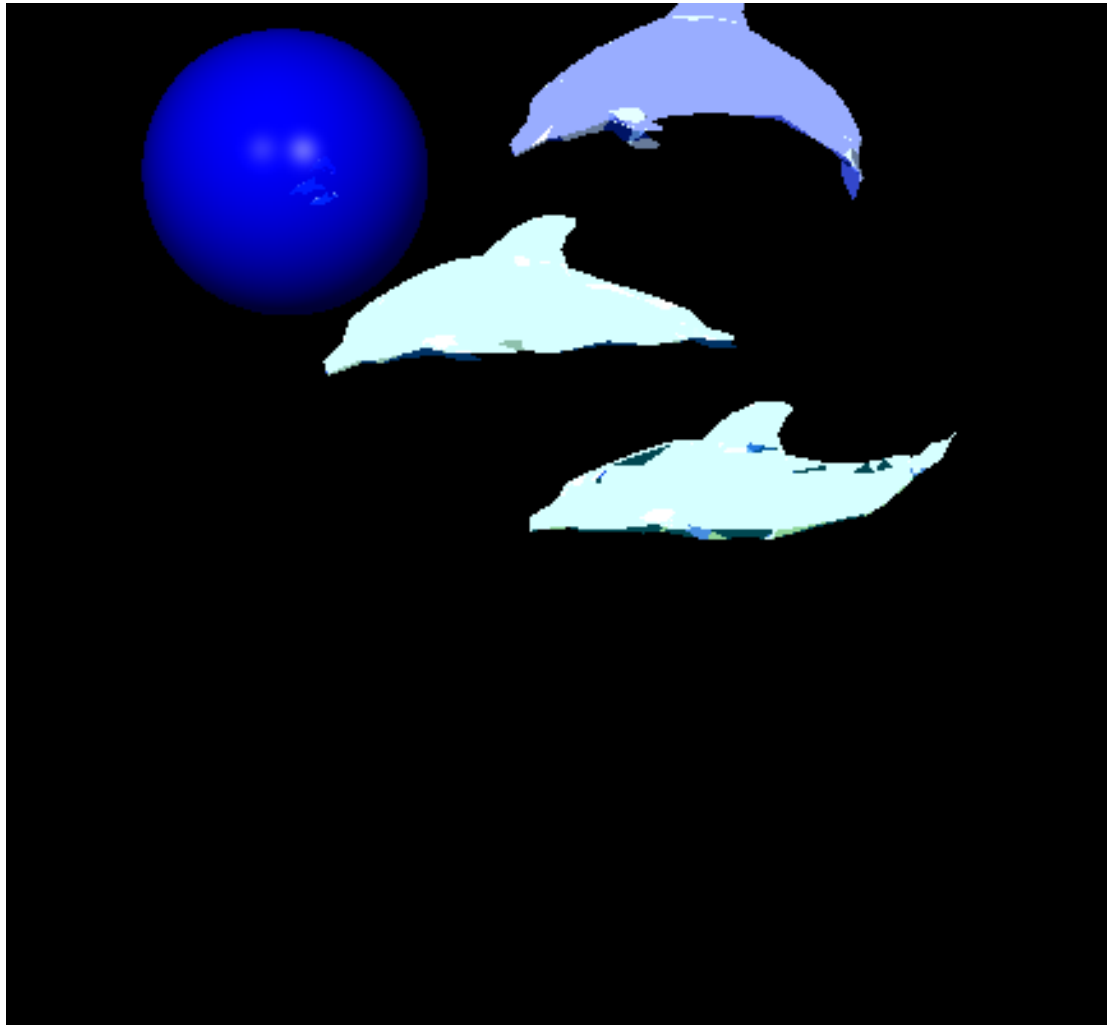

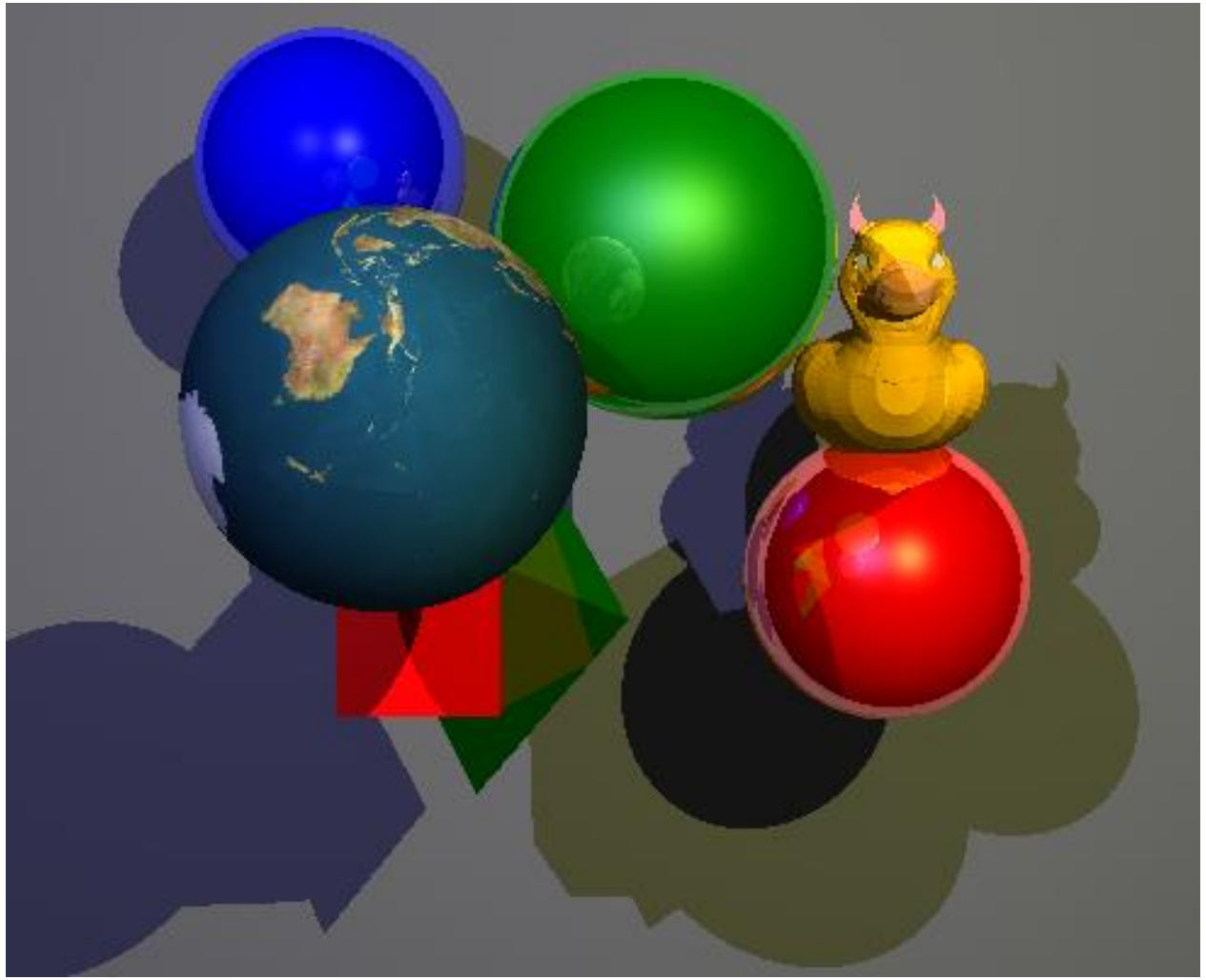

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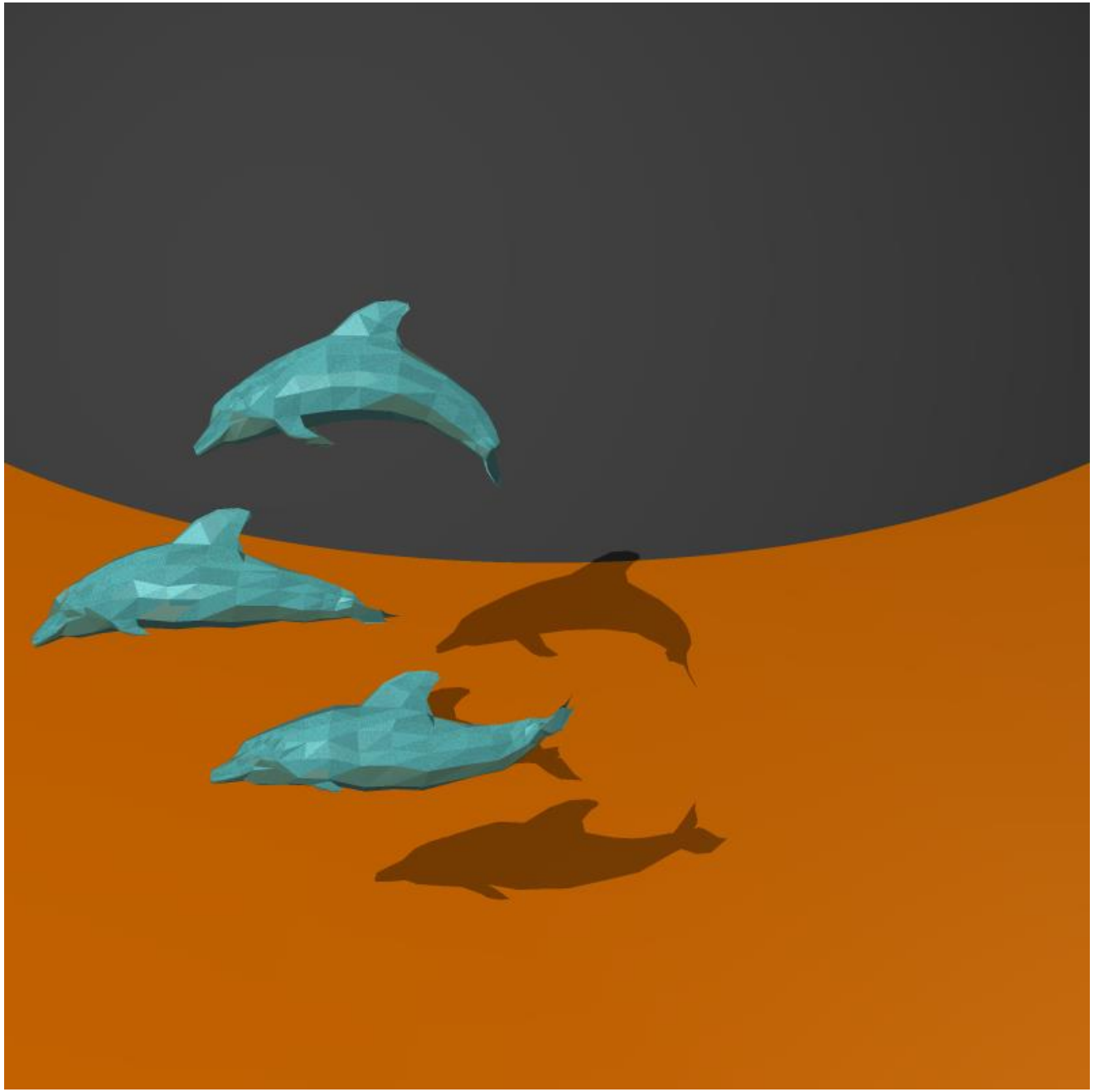

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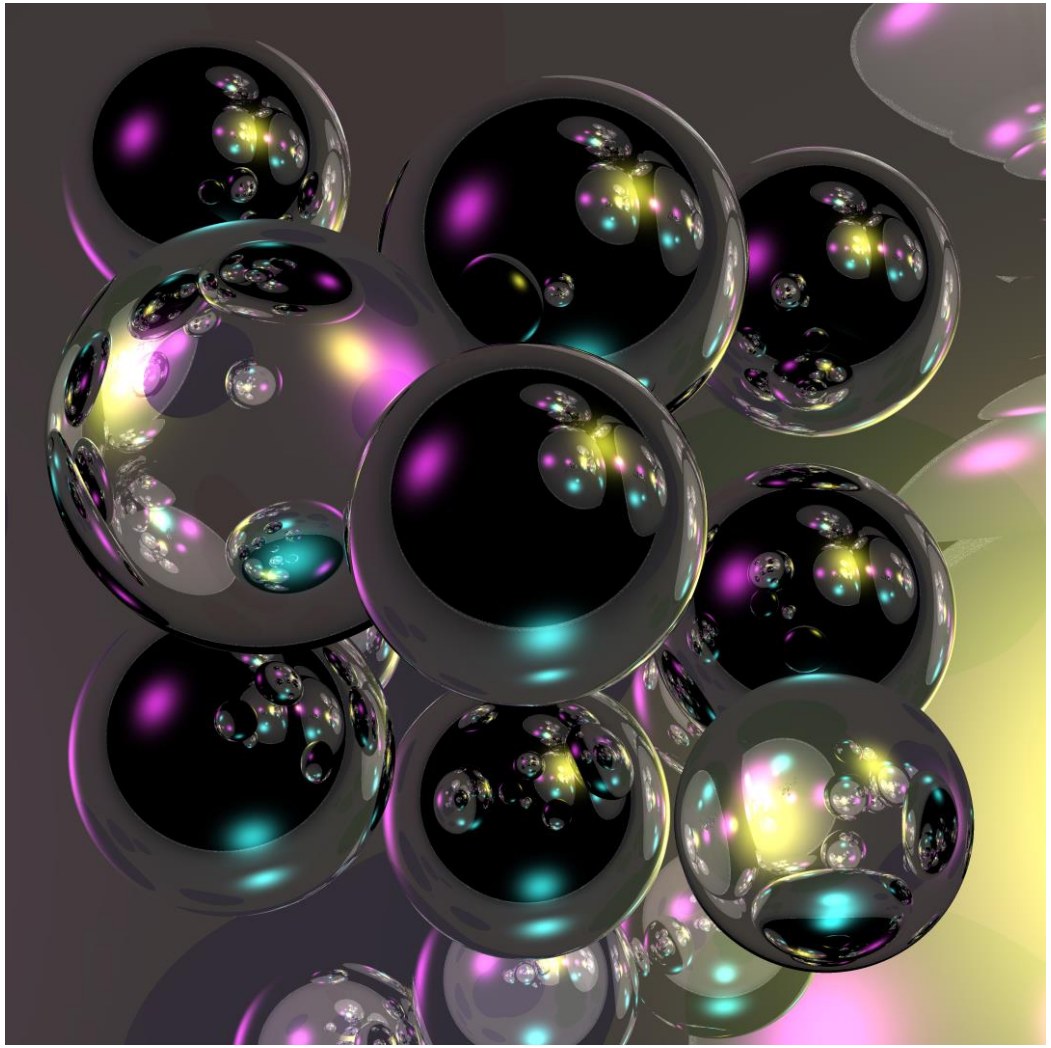
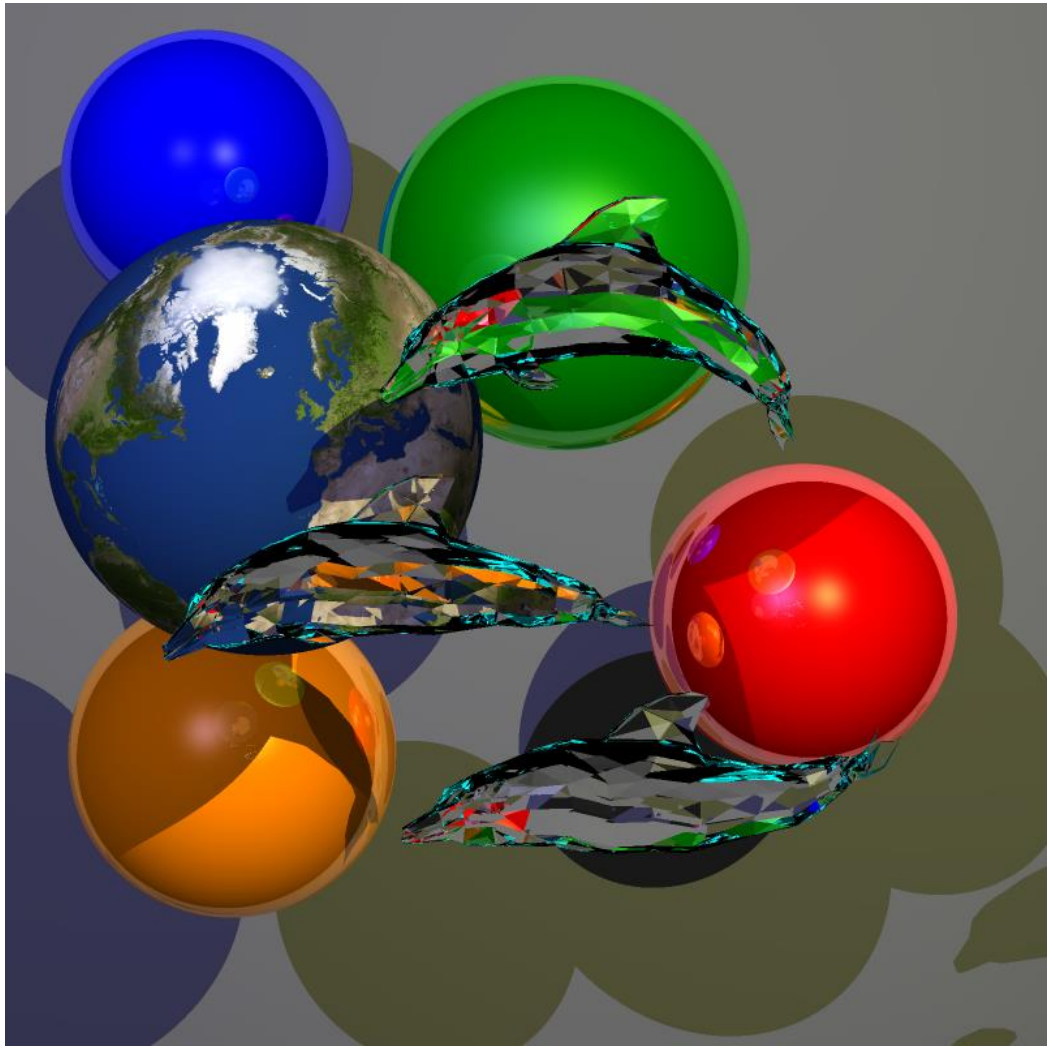
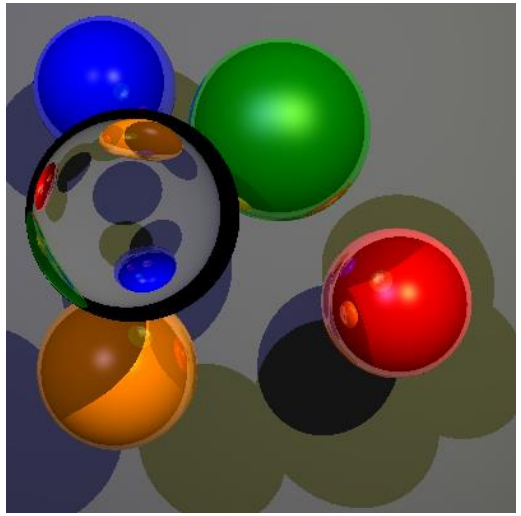
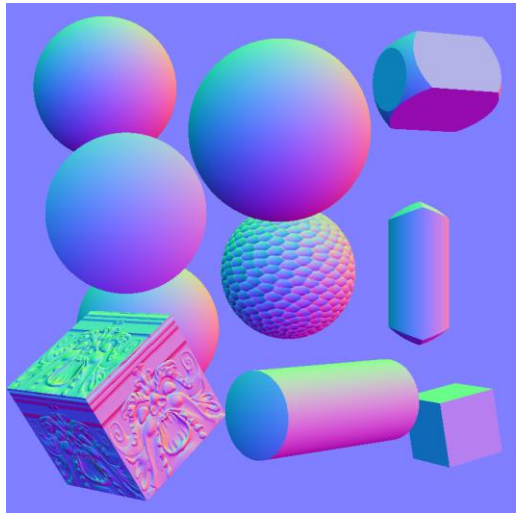
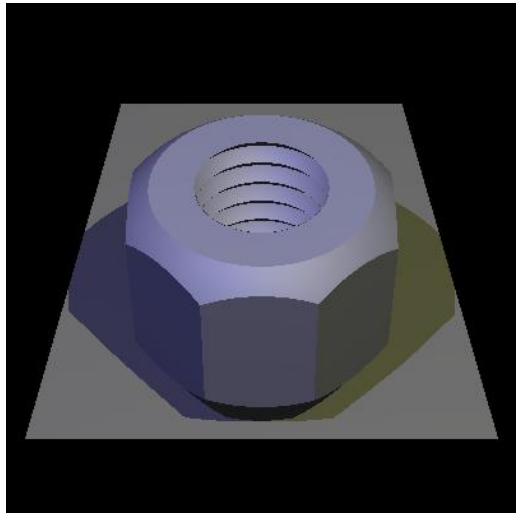
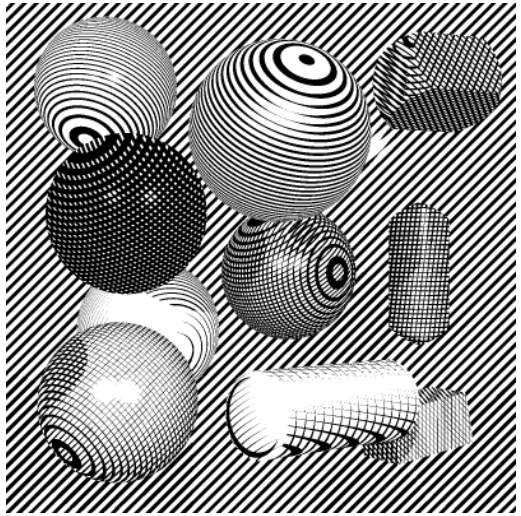




# Final assignments

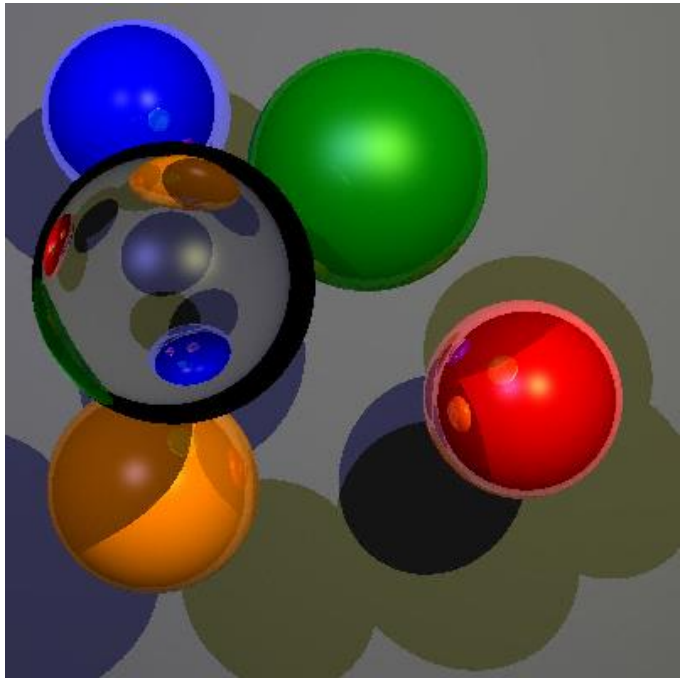
POLYTECH PARIS-SUD

- three tasks (10 points each):
  - implement refraction
  - implement bump-mapping
  - change your implementation to process in parallel to speed-up the raytracing computation
  - deadline: day before exam/ presentation
- bonus ideas:
  - still possible

# What did we learn in this class?

- cool computer graphics techniques
- efficiency and effectiveness
- computational complexity (not always O(…))
- parallel computation (GPU & CPU)
- numerics in computer science
- visual debugging and error analysis
- compilers (implicit casting, rounding, differences)
- human perception (color, shadows, bump mapping)

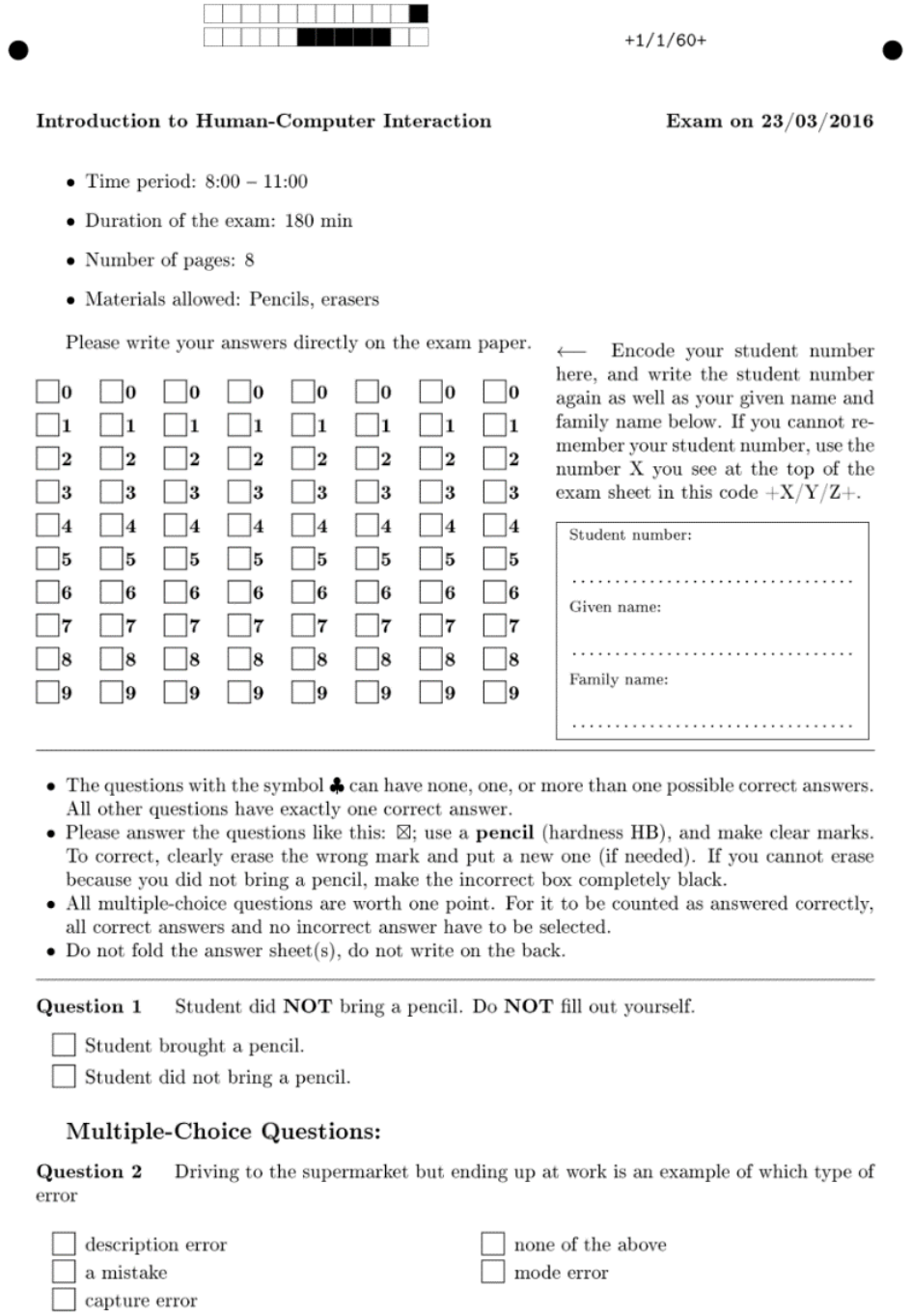


# What will the exam be about?

- what we talked about in class:
  - principles, algorithms, techniques, approaches
  - only material from class, nothing else
- use slides on the website to study
- multiple-choice exam
  - 2h in total, approx. 20–30 questions
  - correct/incorrect statements about the different approaches

# Multiple-choice exam

- exam not time-critical
- no negative points
- no materials other than pen and brain
- final grade: 50% exam, 50% tutorial



+1/1/60+

**Introduction to Human-Computer Interaction** **Exam on 23/03/2016**

- Time period: 8:00 – 11:00
- Duration of the exam: 180 min
- Number of pages: 8
- Materials allowed: Pencils, erasers

Please write your answers directly on the exam paper.

☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0
☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1
☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2
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⟵ Encode your student number here, and write the student number again as well as your given name and family name below. If you cannot remember your student number, use the number X you see at the top of the exam sheet in this code +X/Y/Z+.

Student number: .....
Given name: .....
Family name: .....

- The questions with the symbol ♣ can have none, one, or more than one possible correct answers. All other questions have exactly one correct answer.
- Please answer the questions like this: ☒; use a **pencil** (hardness HB), and make clear marks. To correct, clearly erase the wrong mark and put a new one (if needed). If you cannot erase because you did not bring a pencil, make the incorrect box completely black.
- All multiple-choice questions are worth one point. For it to be counted as answered correctly, all correct answers and no incorrect answer have to be selected.
- Do not fold the answer sheet(s), do not write on the back.

**Question 1** Student did **NOT** bring a pencil. Do **NOT** fill out yourself.

☐ Student brought a pencil.
☐ Student did not bring a pencil.

**Multiple-Choice Questions:**

**Question 2** Driving to the supermarket but ending up at work is an example of which type of error

☐ description error
☐ a mistake
☐ capture error
☐ none of the above
☐ mode error

# Final meetings

- backup teaching slot: Feb. 14 (next week)
  → 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
- please also send your best 1—2 result images if not done yet