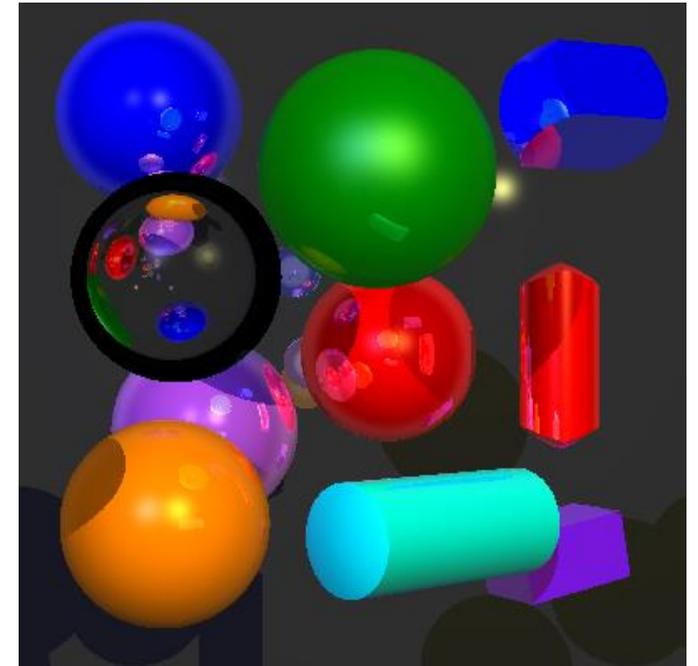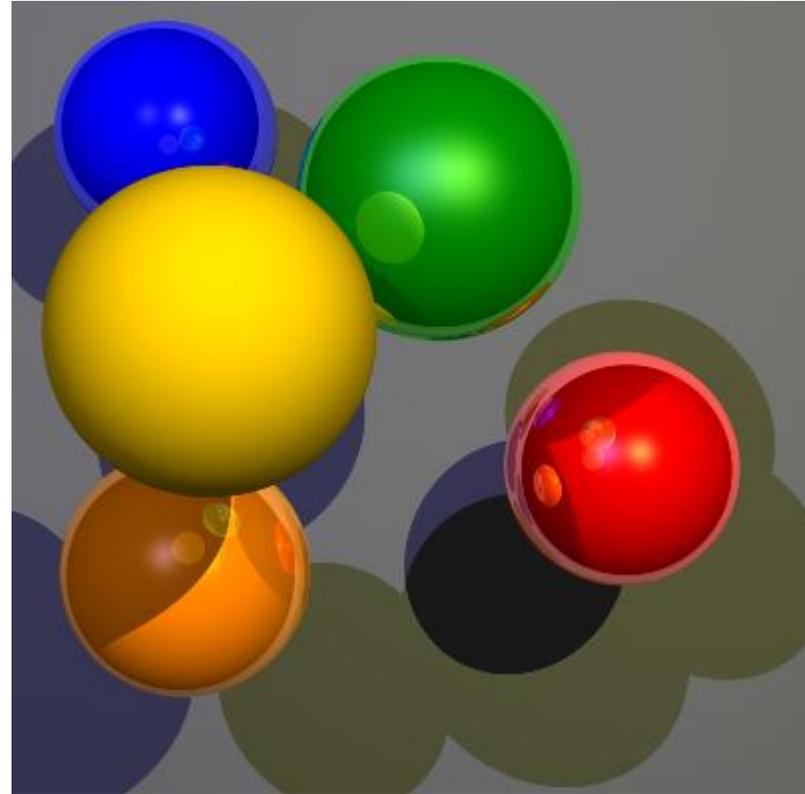**Lab Sessions**
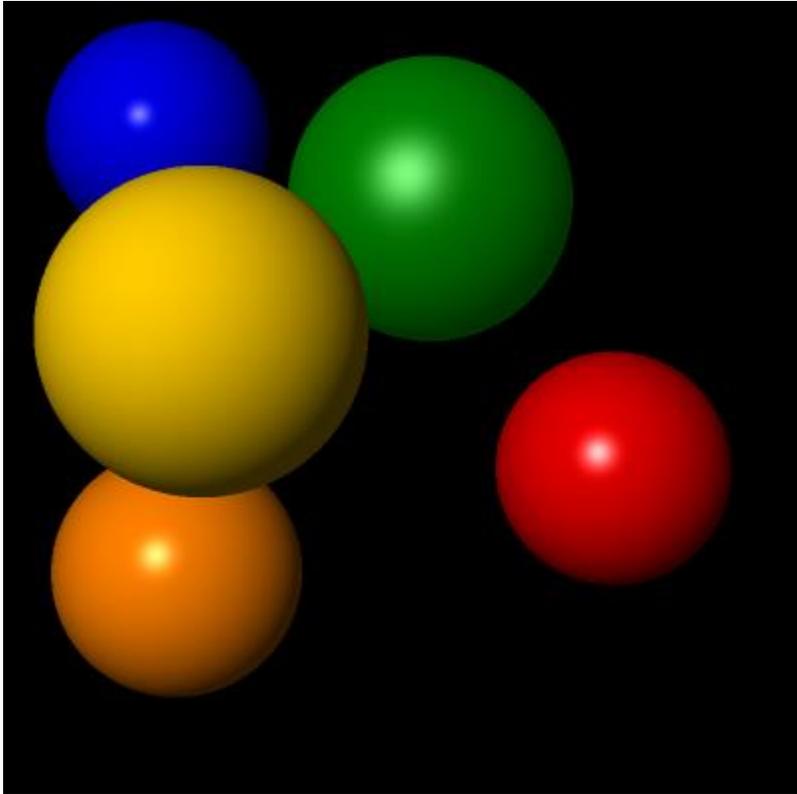
Photorealistic Rendering (Advanced Computer Graphics)
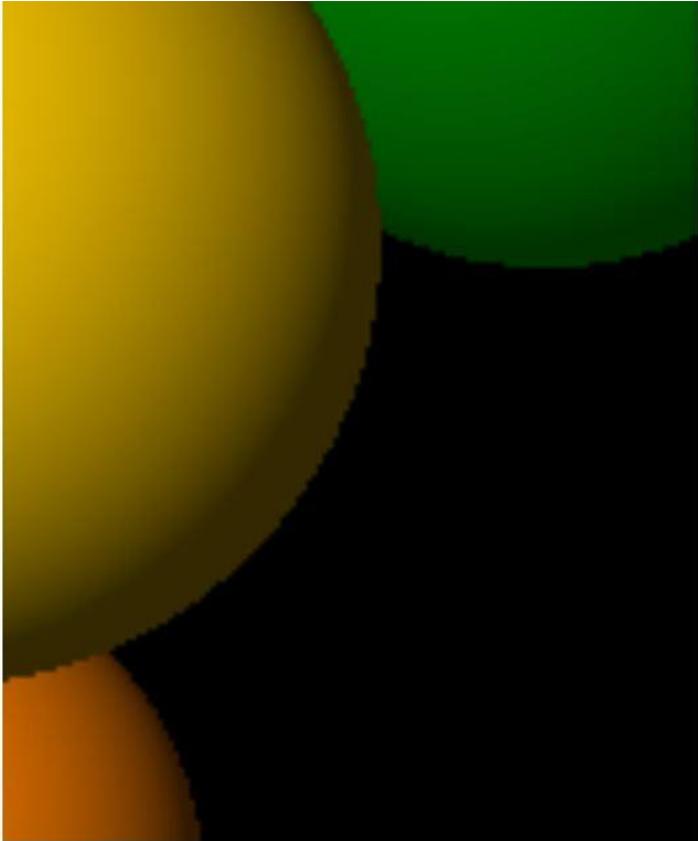
Tobias Isenberg
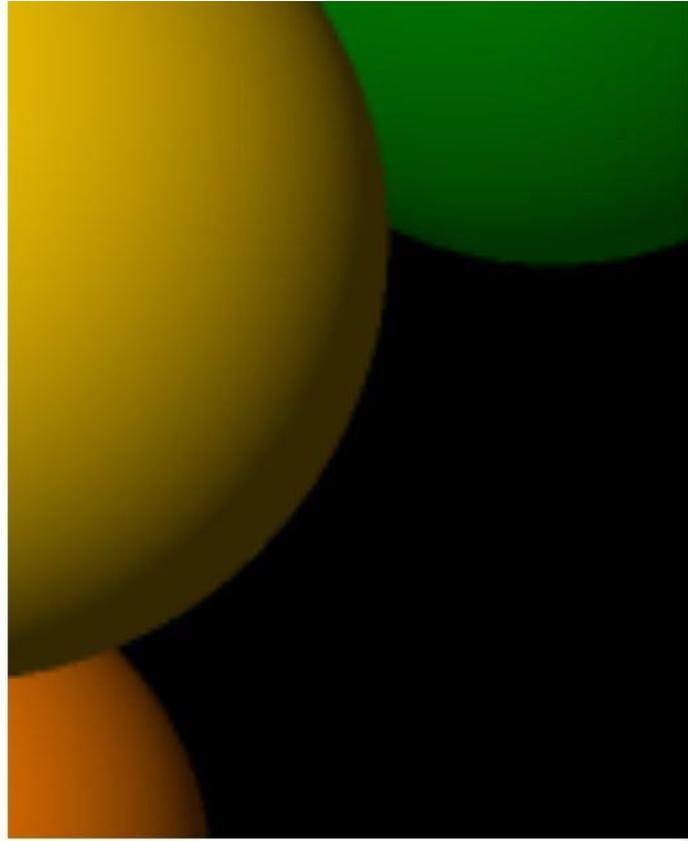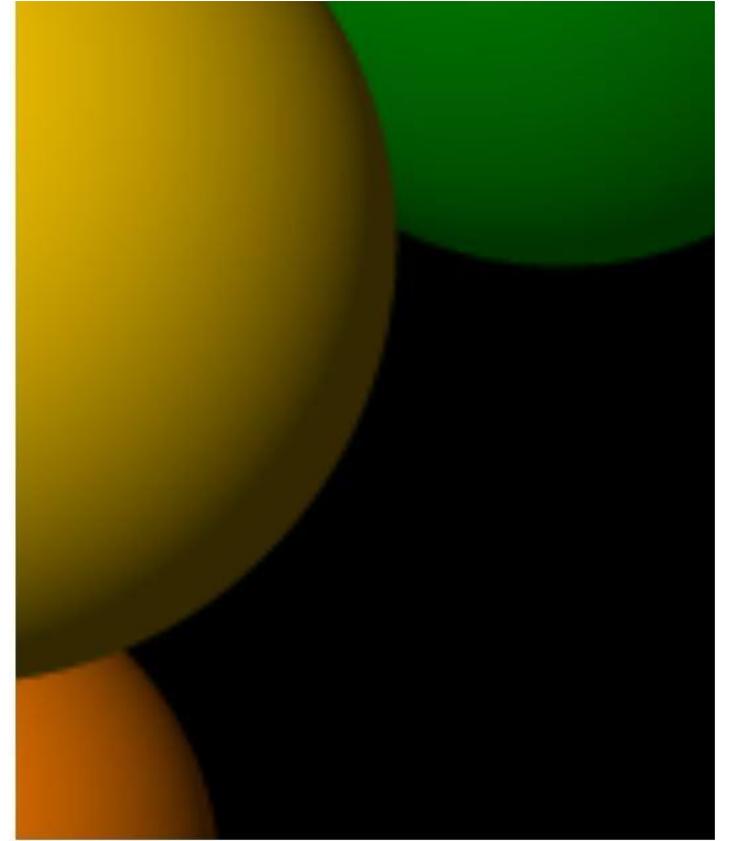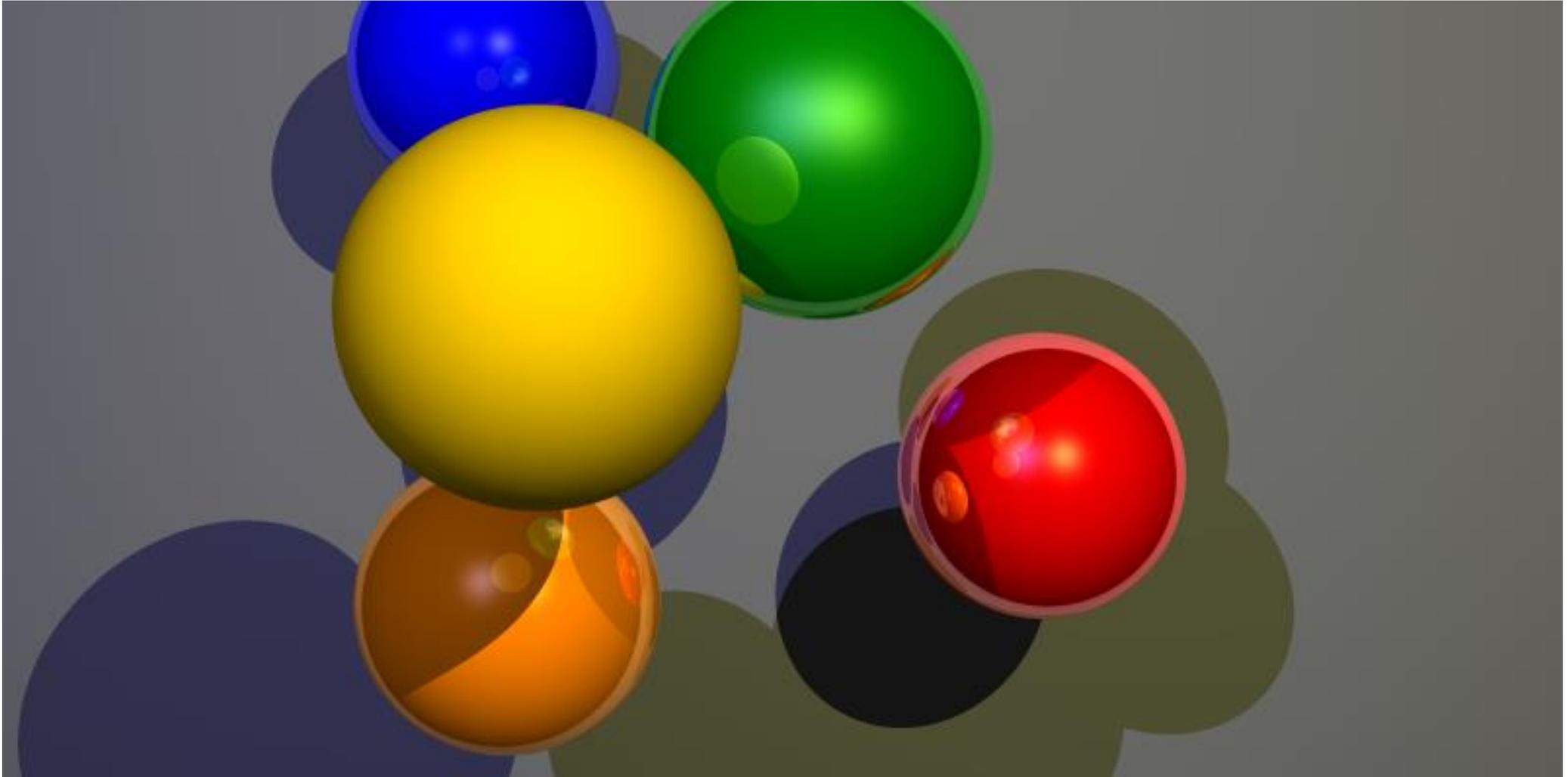
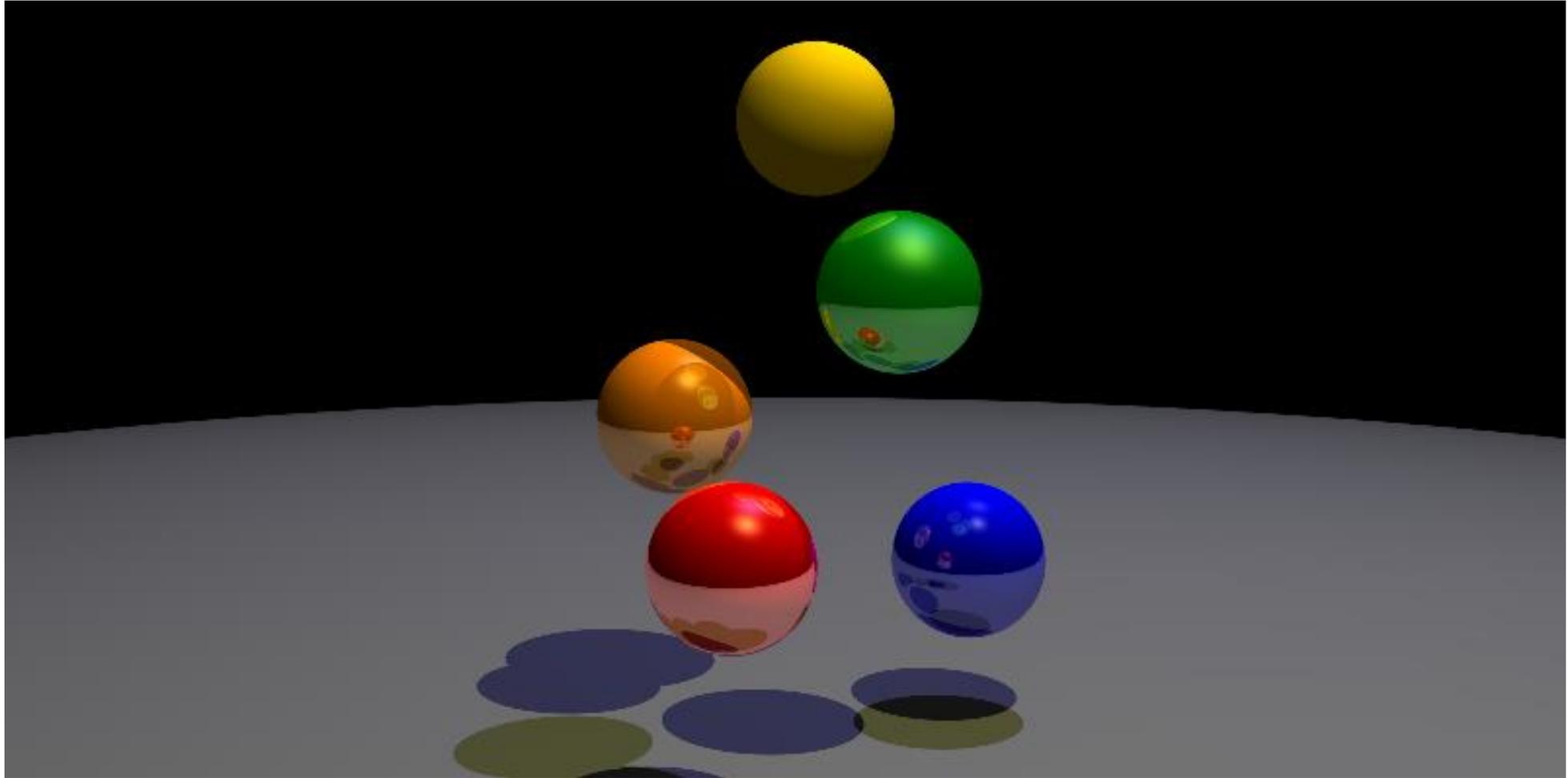# Results

Results

NO SUPER SAMPLING

2x2 SUPER SAMPLING

4x4 SUPER SAMPLING
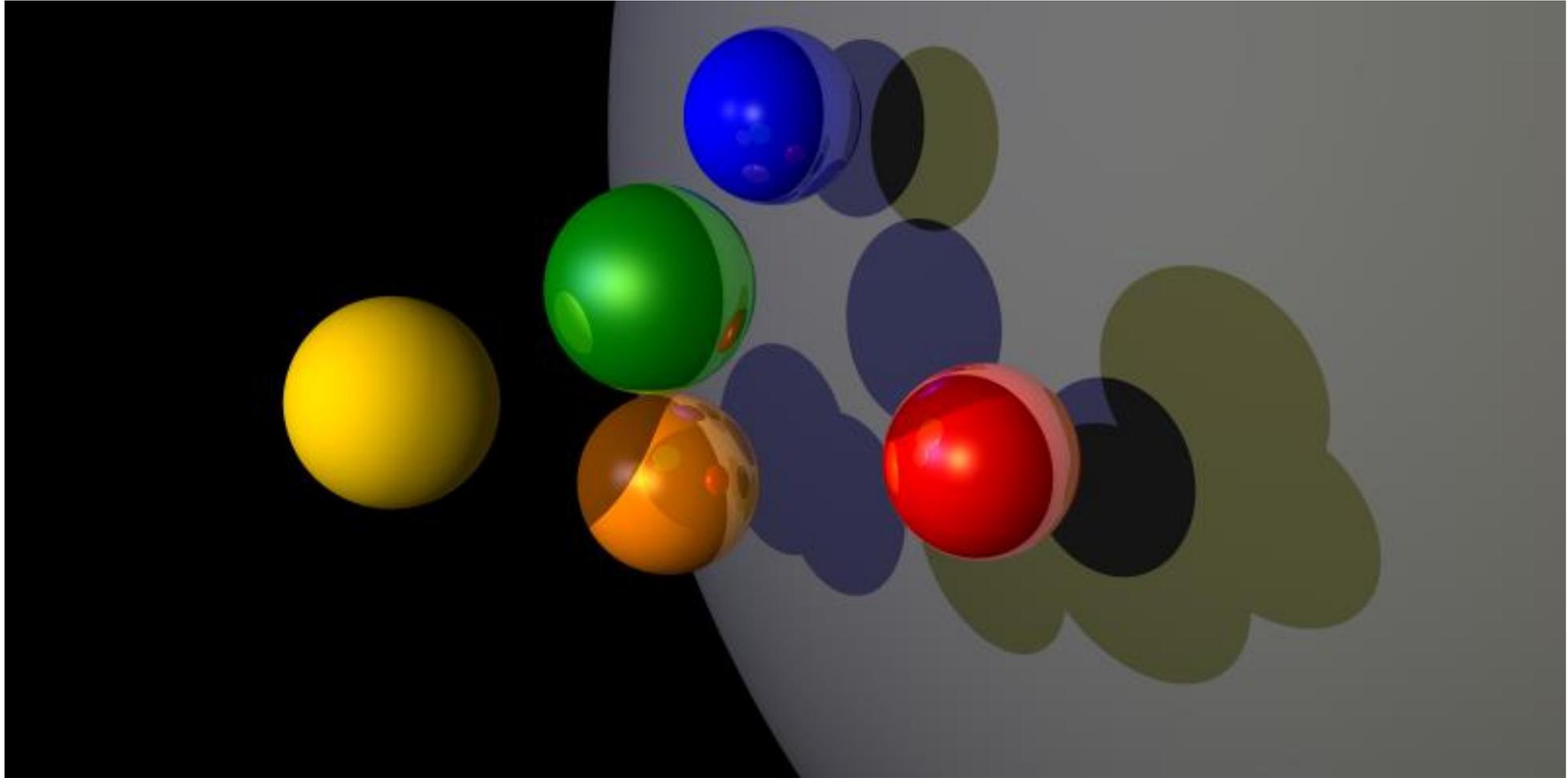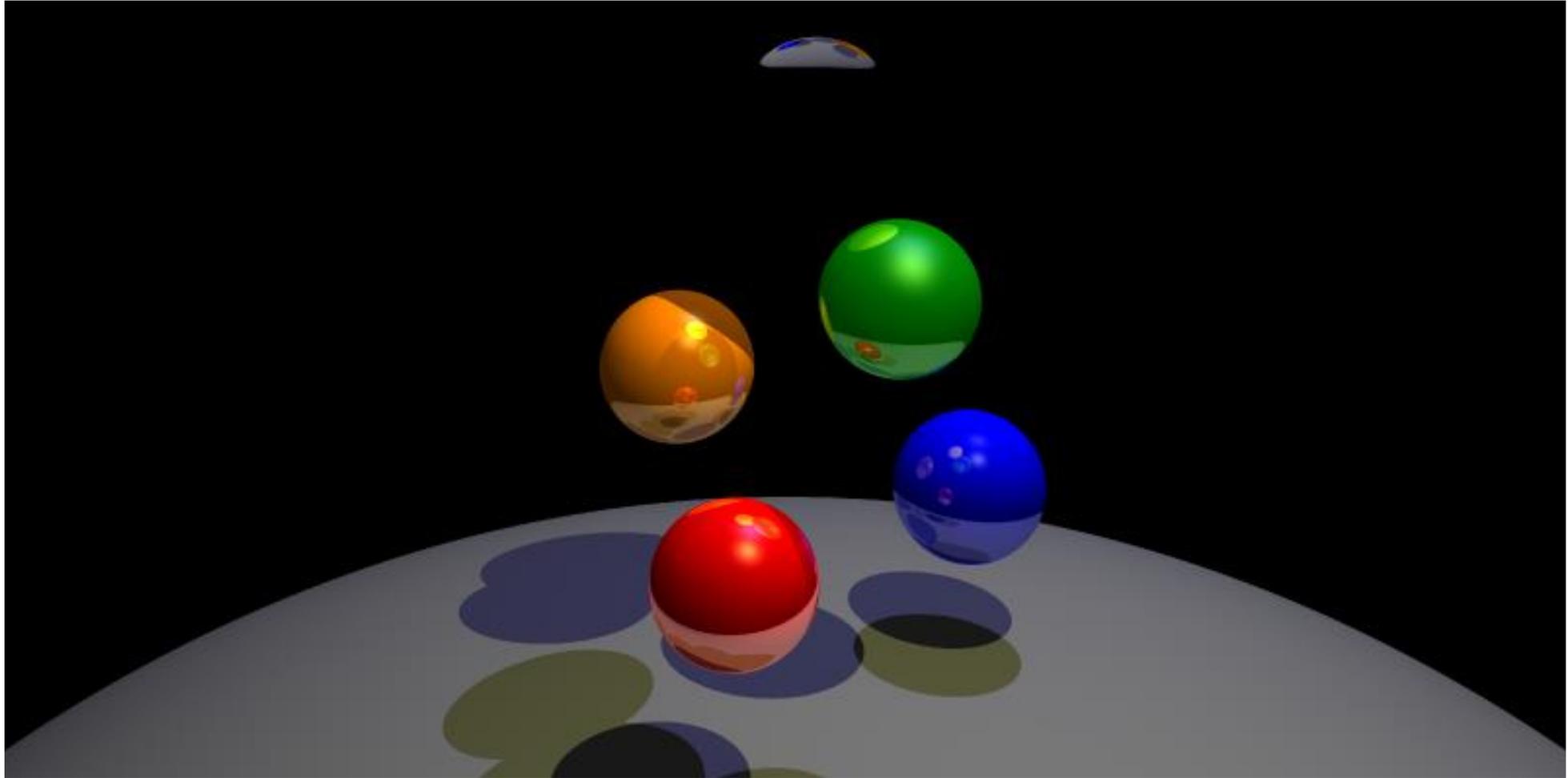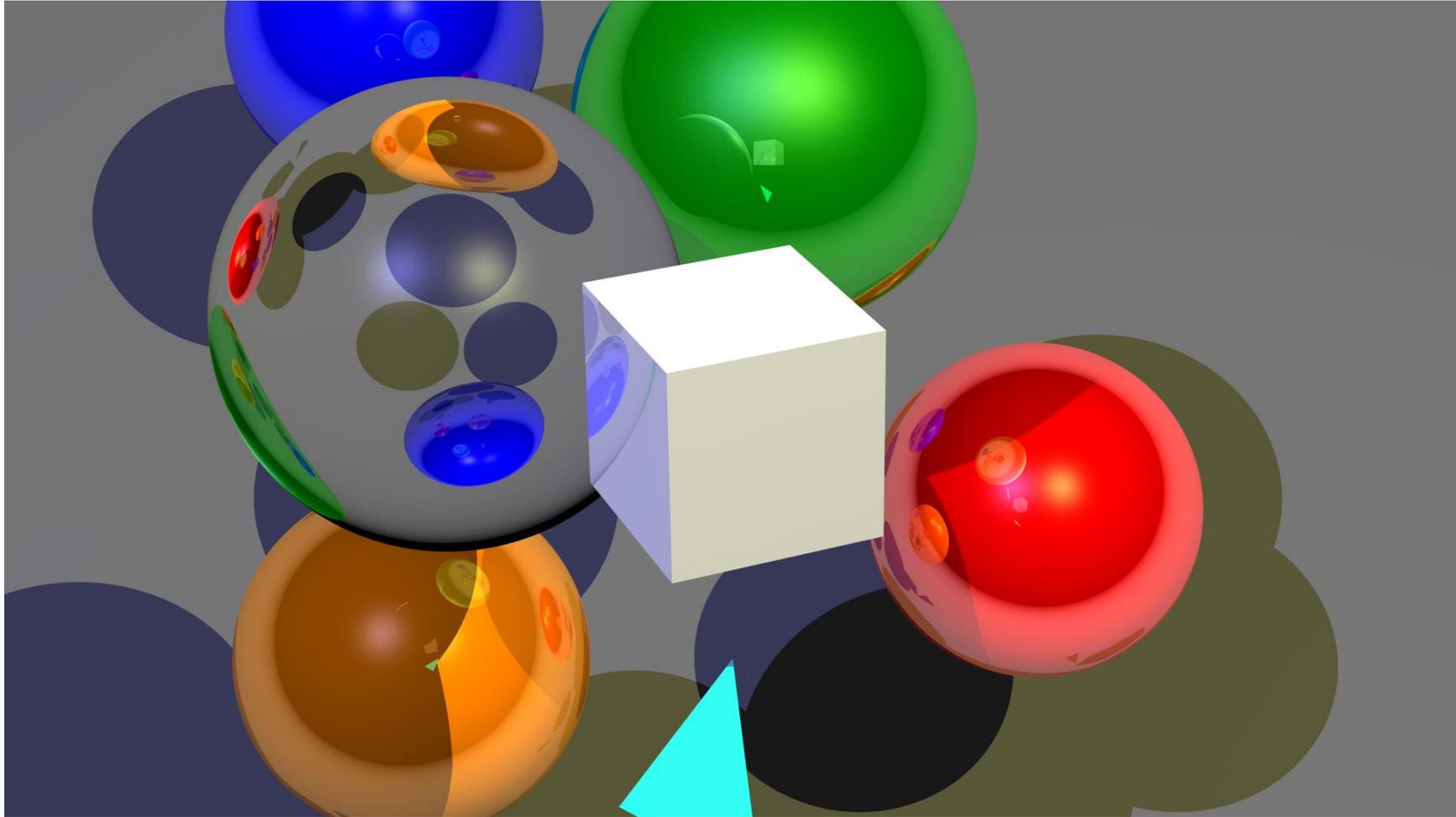
Results

Results

Results

Results
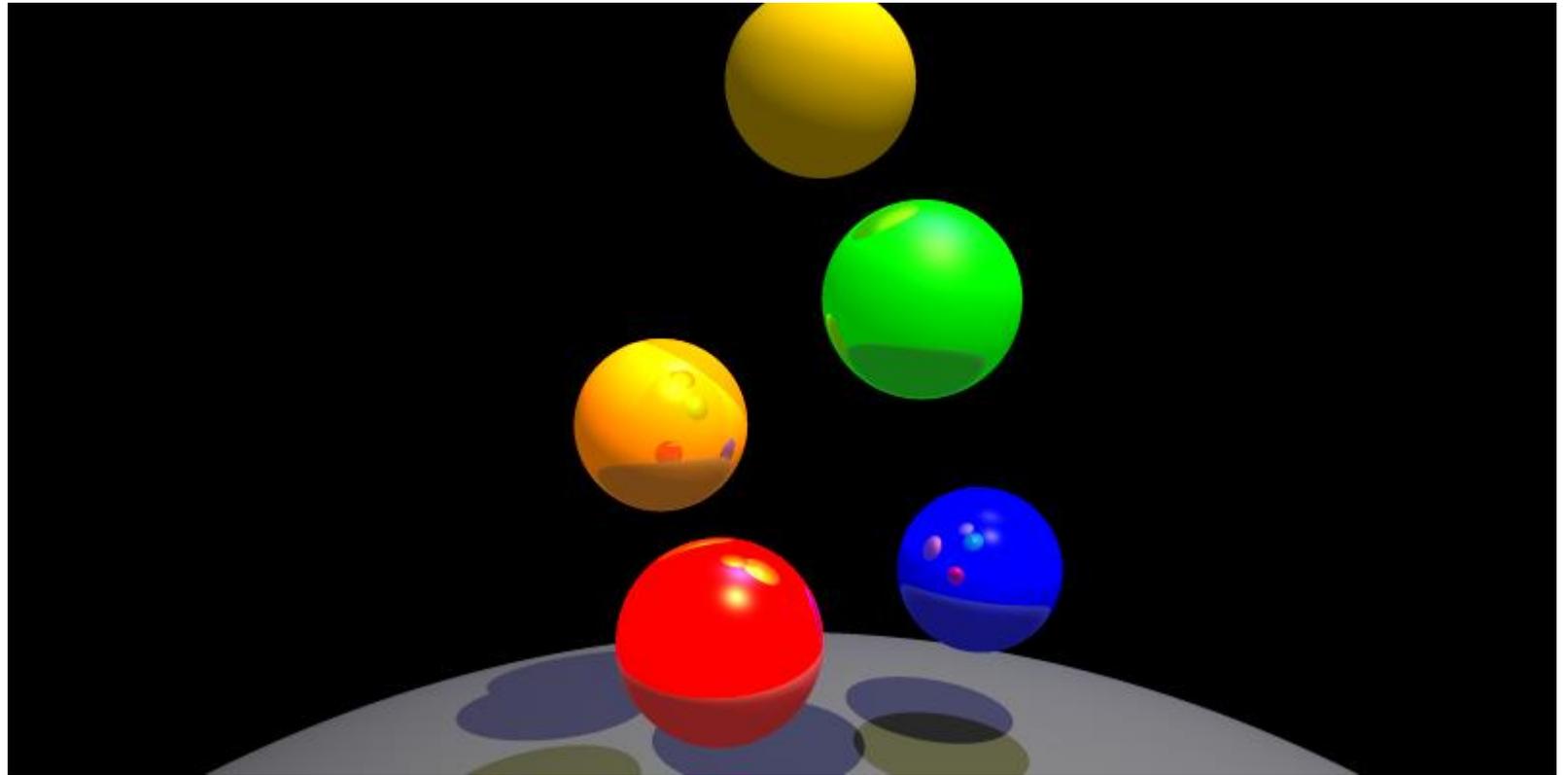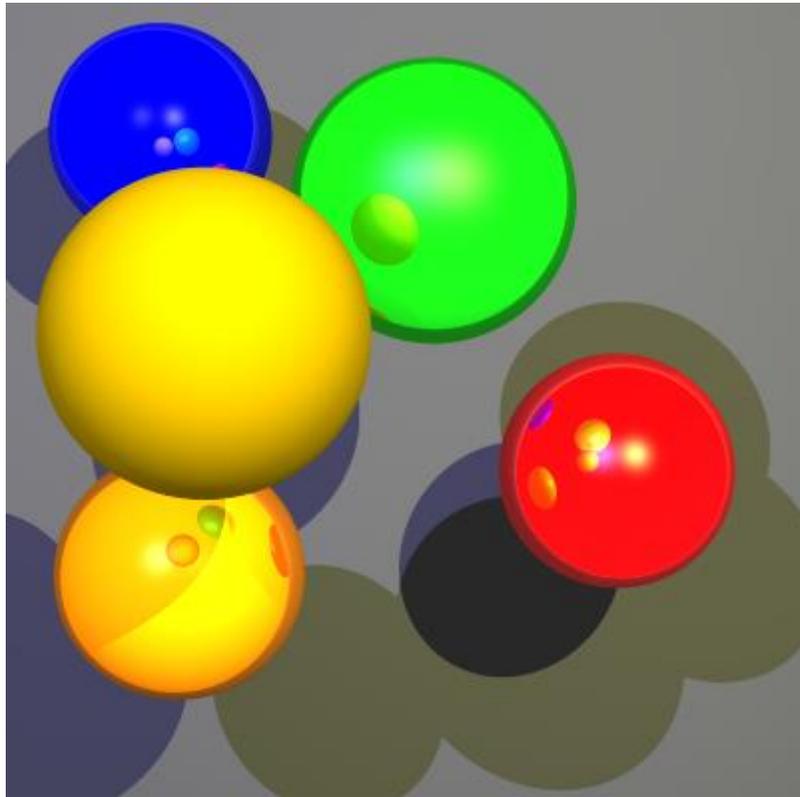
Results
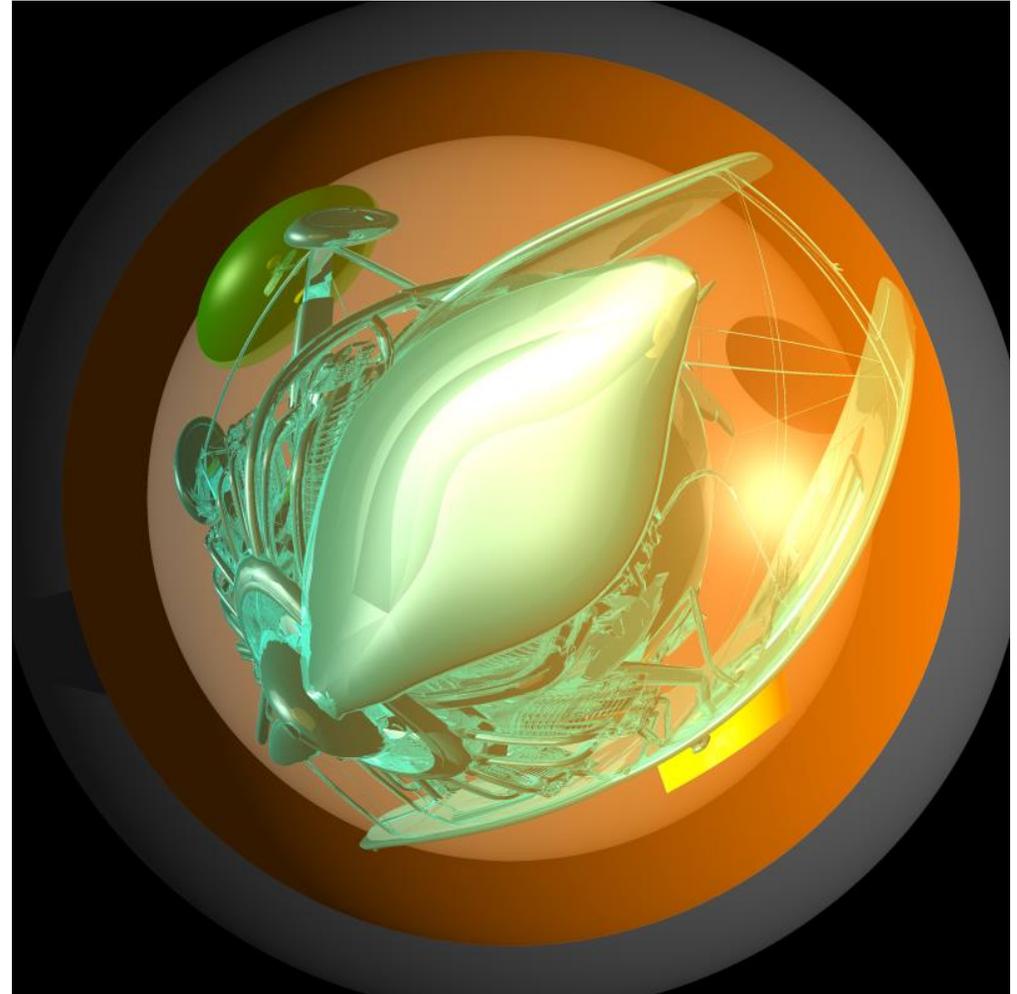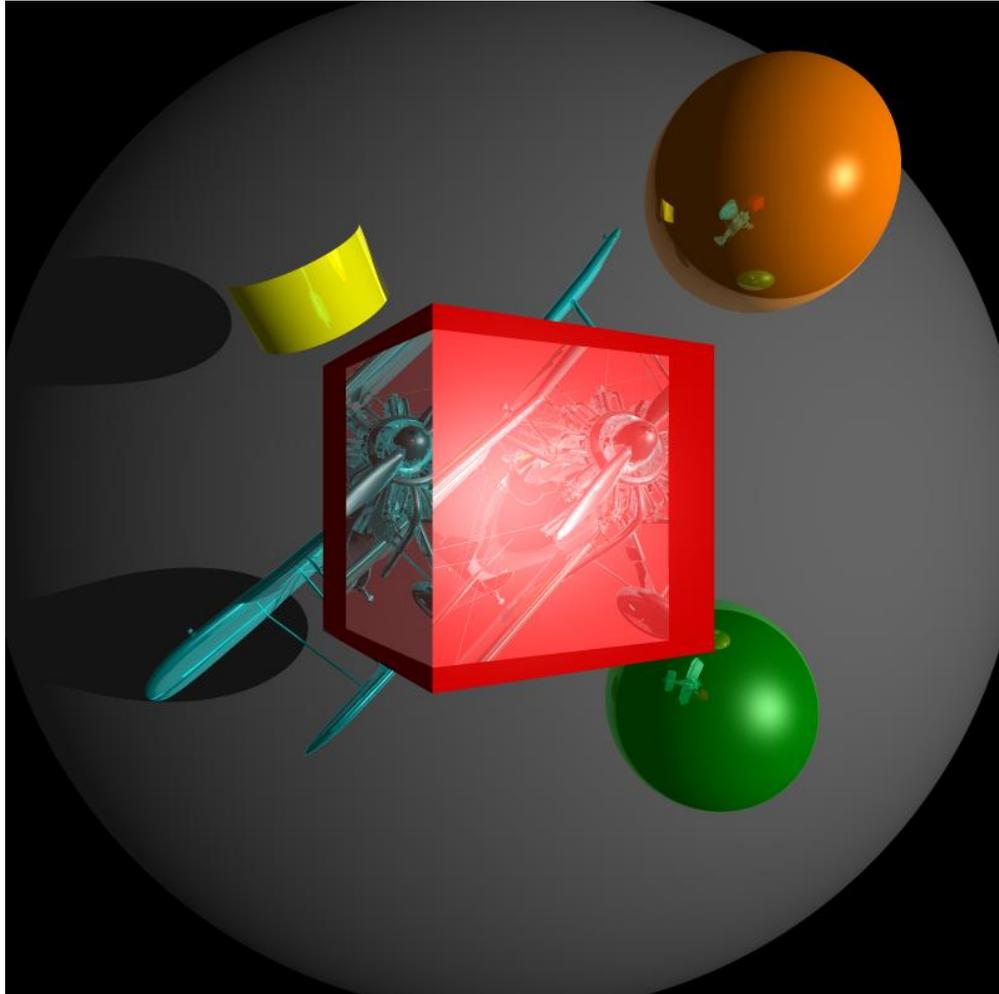
Results

Results

Results

Results: Render preview
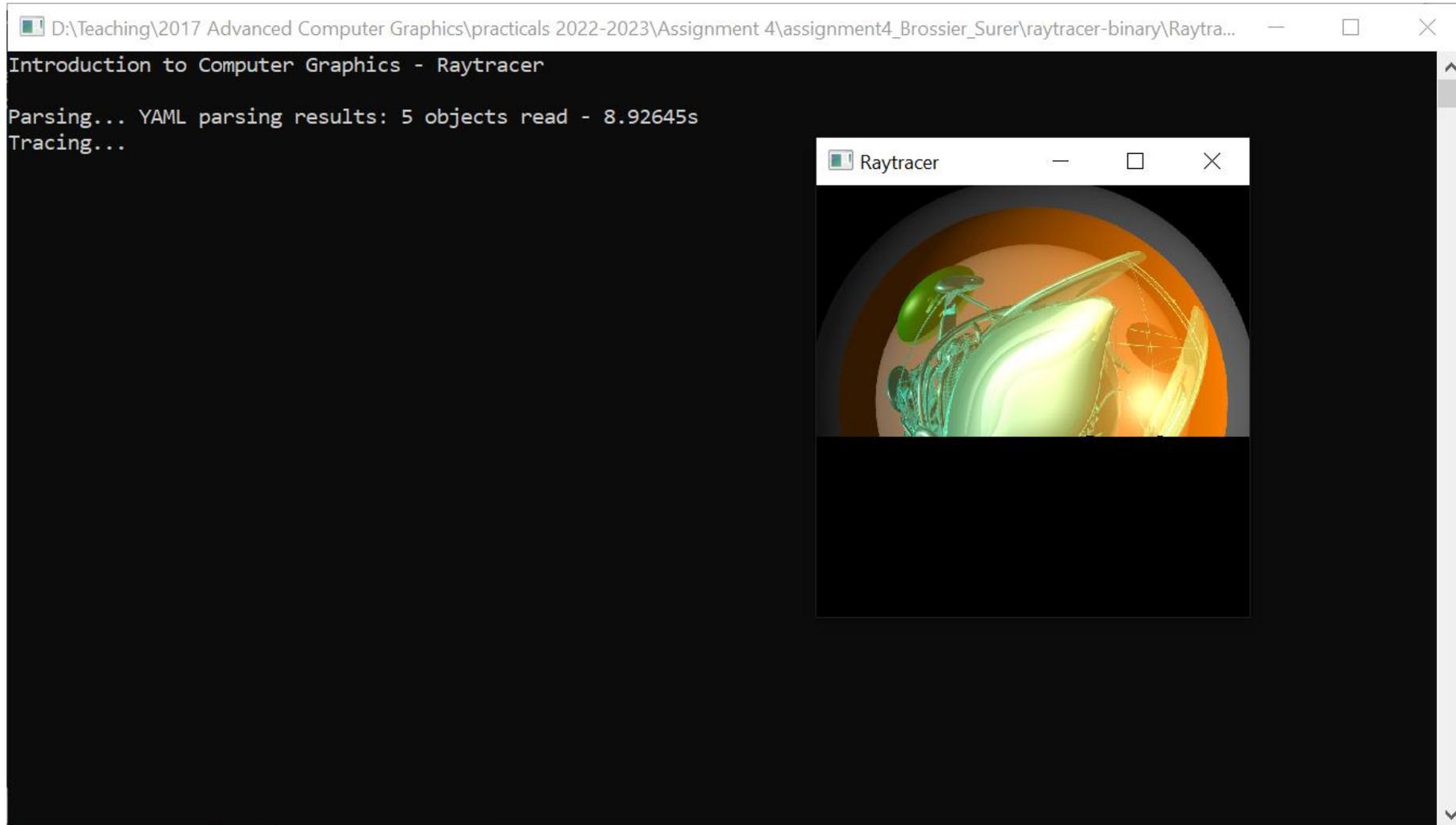
Results: Timing

render time in seconds

Legend: 1x1, 2x2, 4x4, 8x8

Categories: max. recursion 2, max. recursion 5, max. recursion 10, max. recursion 20, max. recursion 50
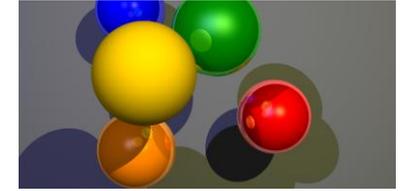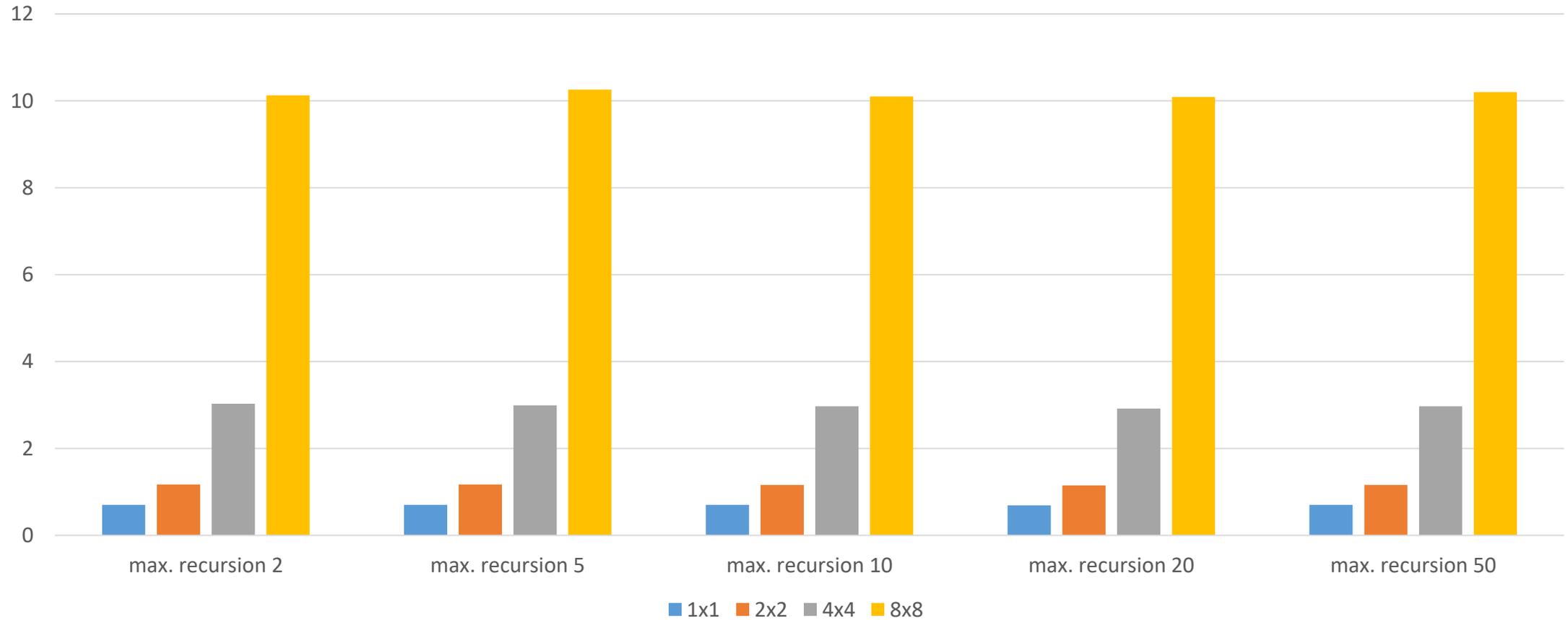
Results: Parallelization

- implemented by two teams
- use of OpenMP
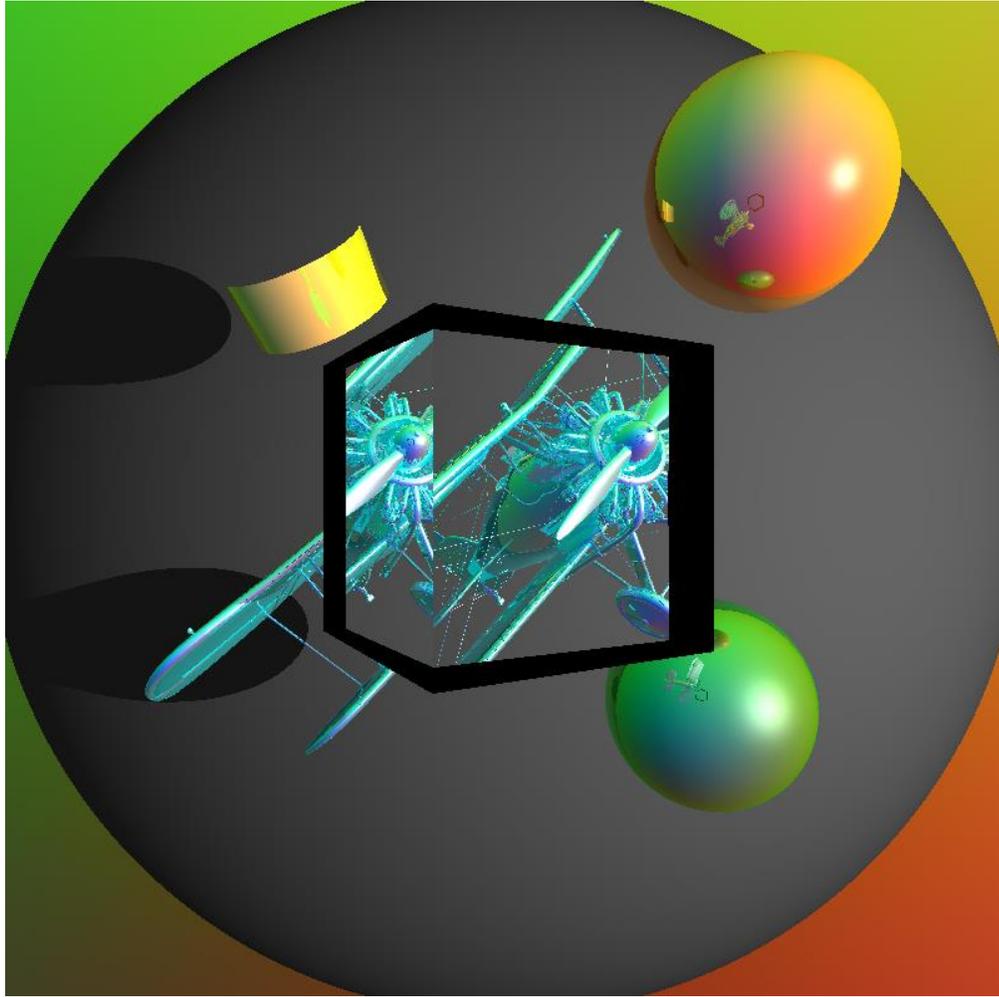- drastic reduction in rendering times: e.g., 18s instead of 100s
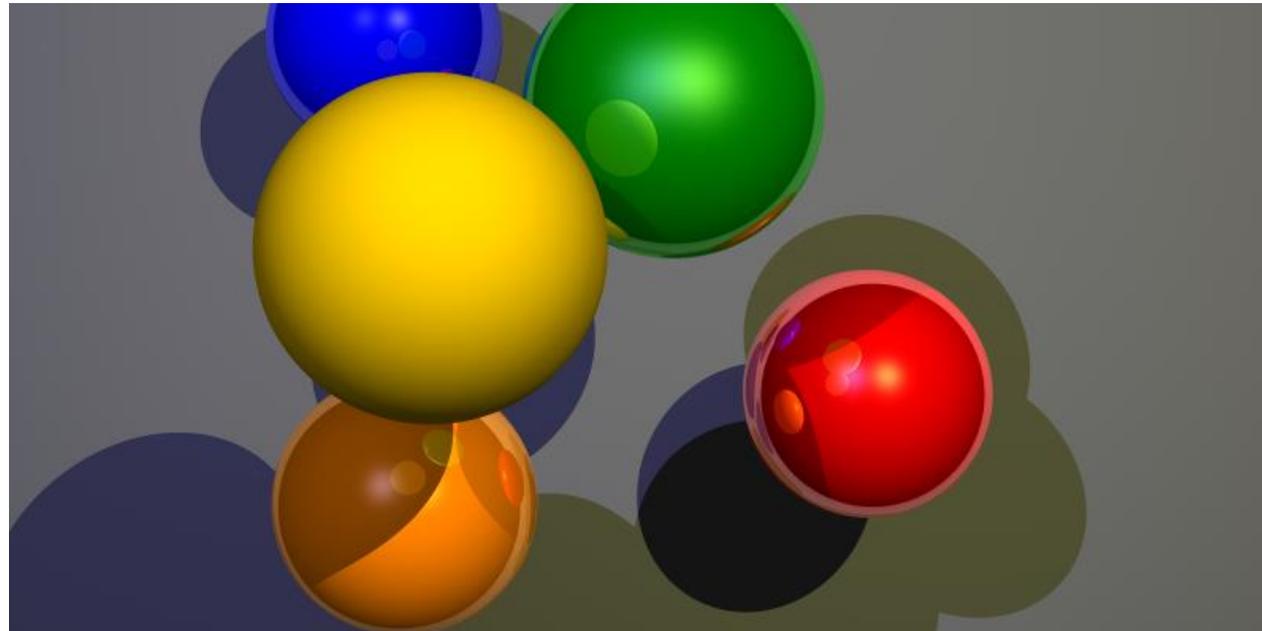
Results (last years)

Results: Depth of field (last years)
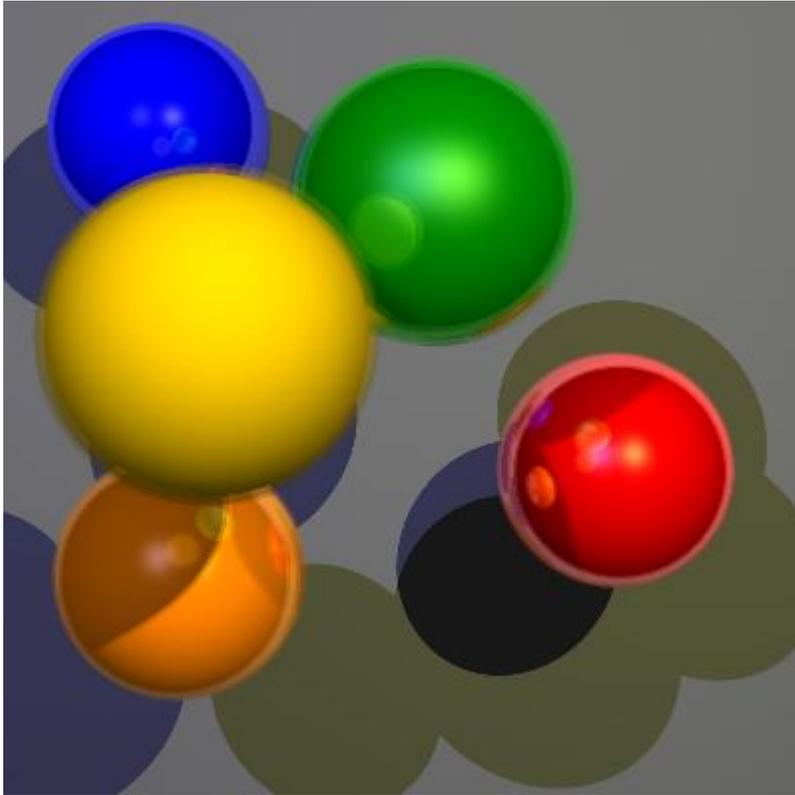
Results: DOF and motion blur (last years)
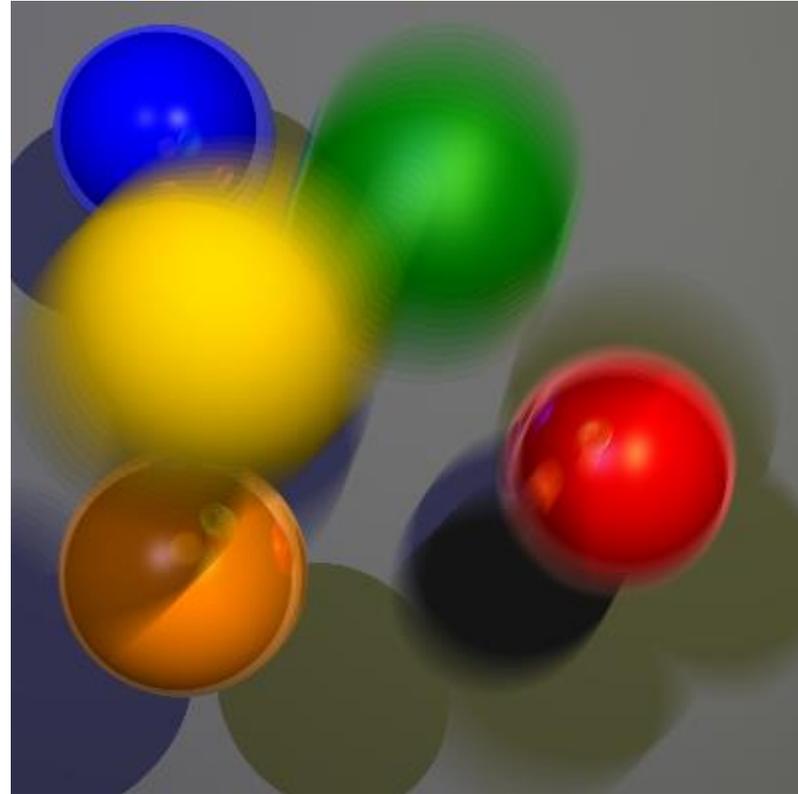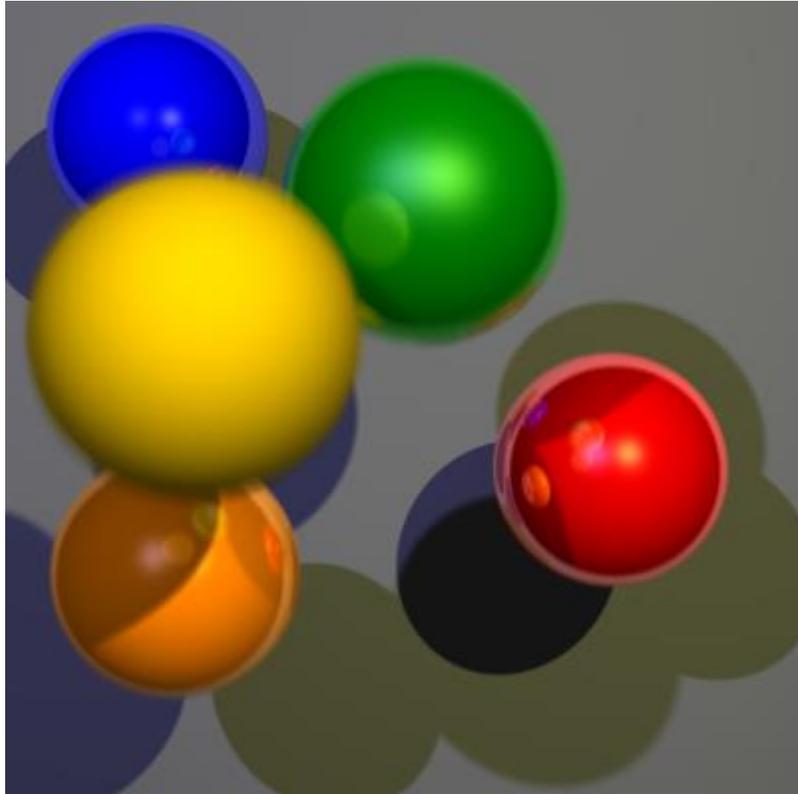
Results: Alpha-blending (last years)

Results (last years)
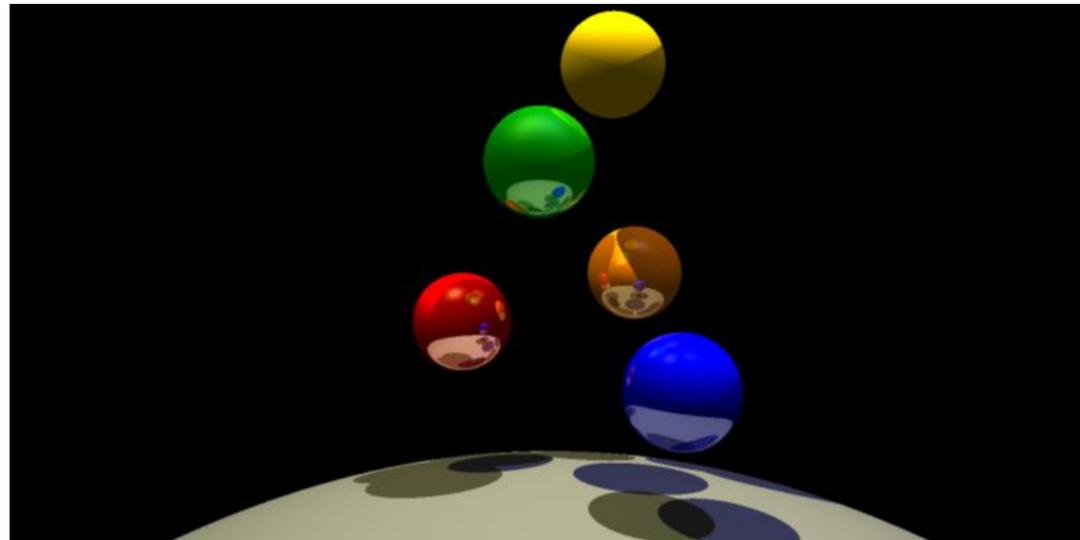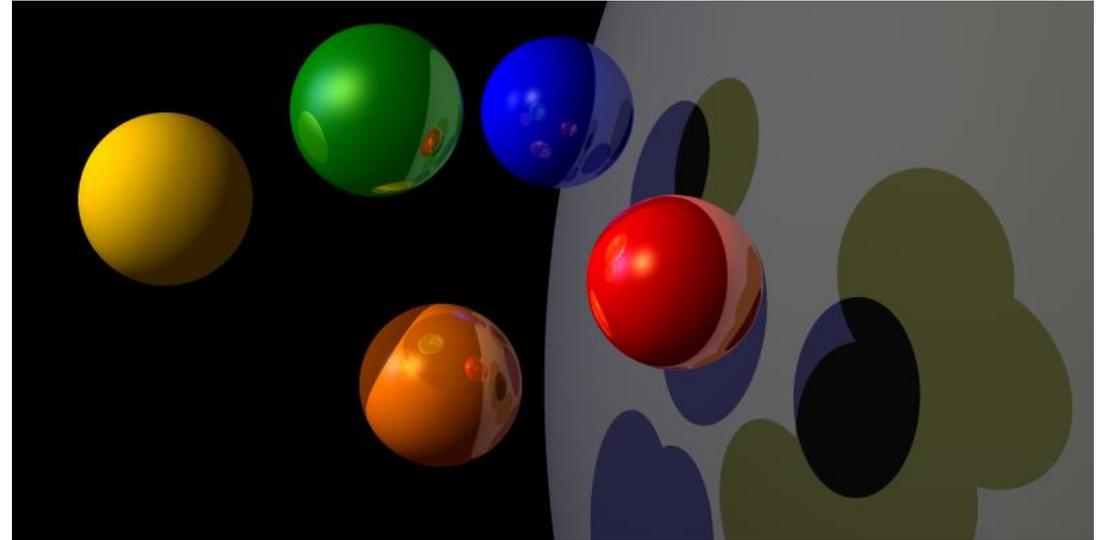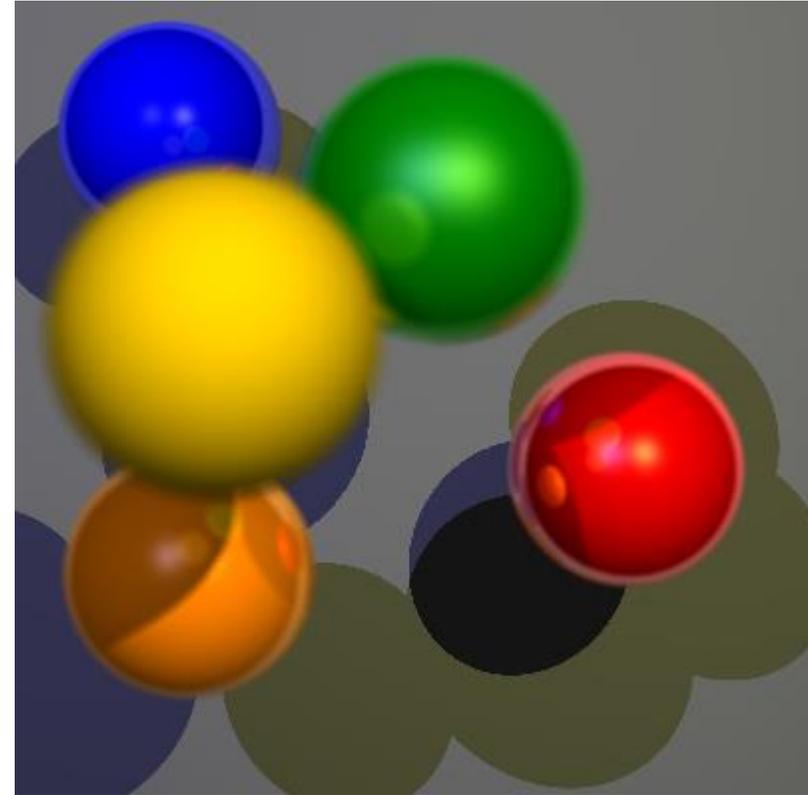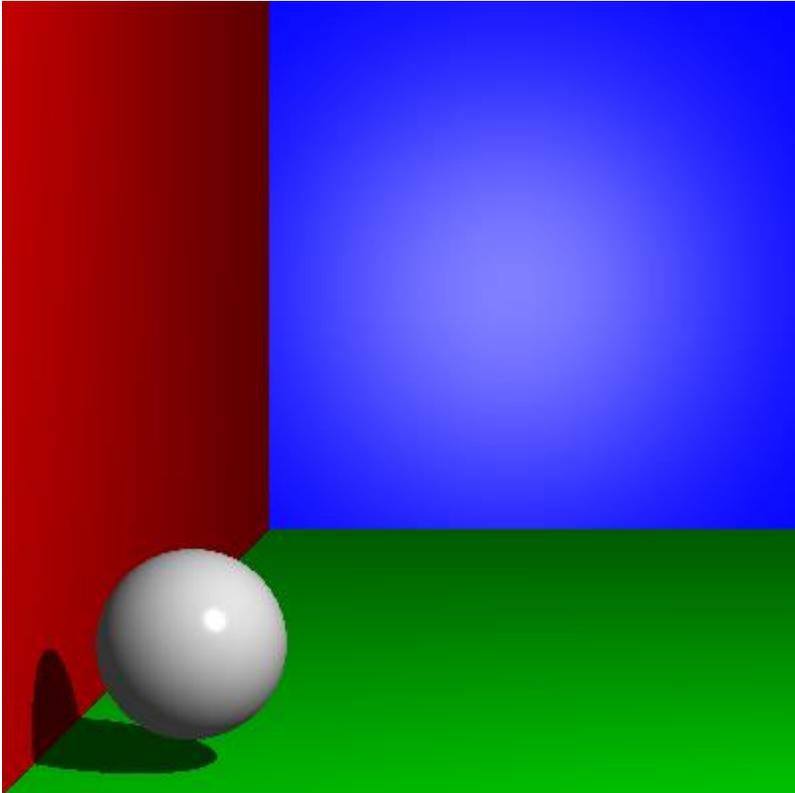
Results (last years)

Interesting results:
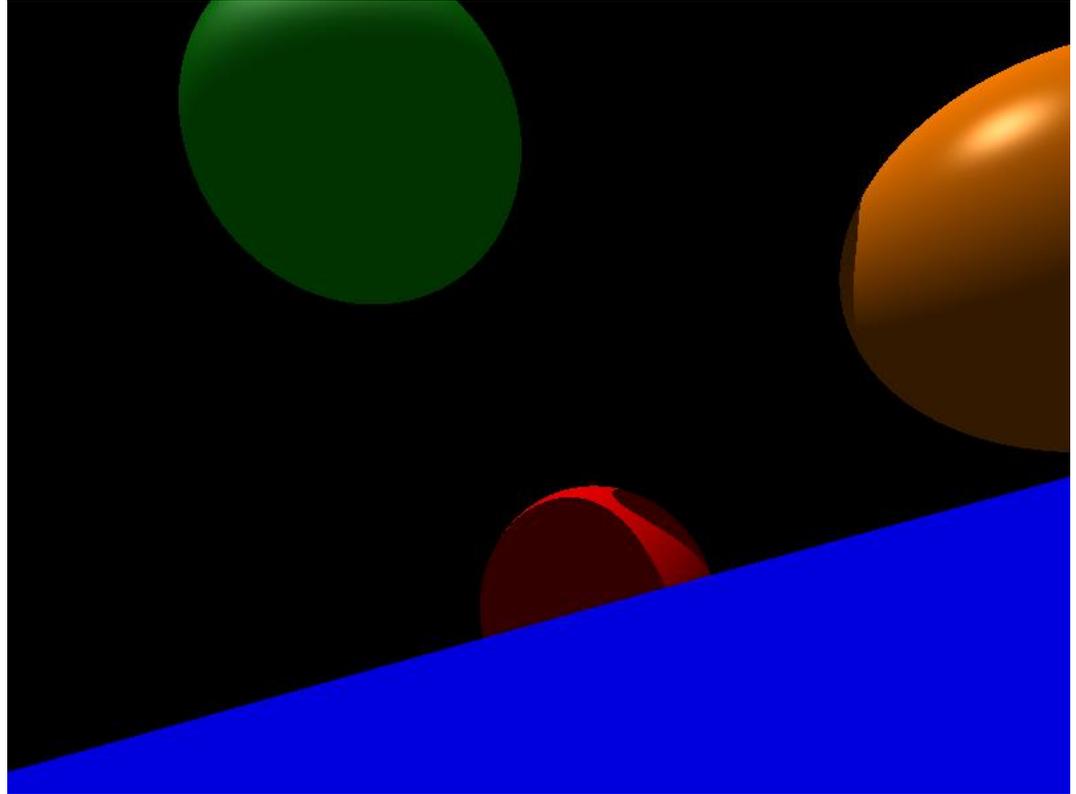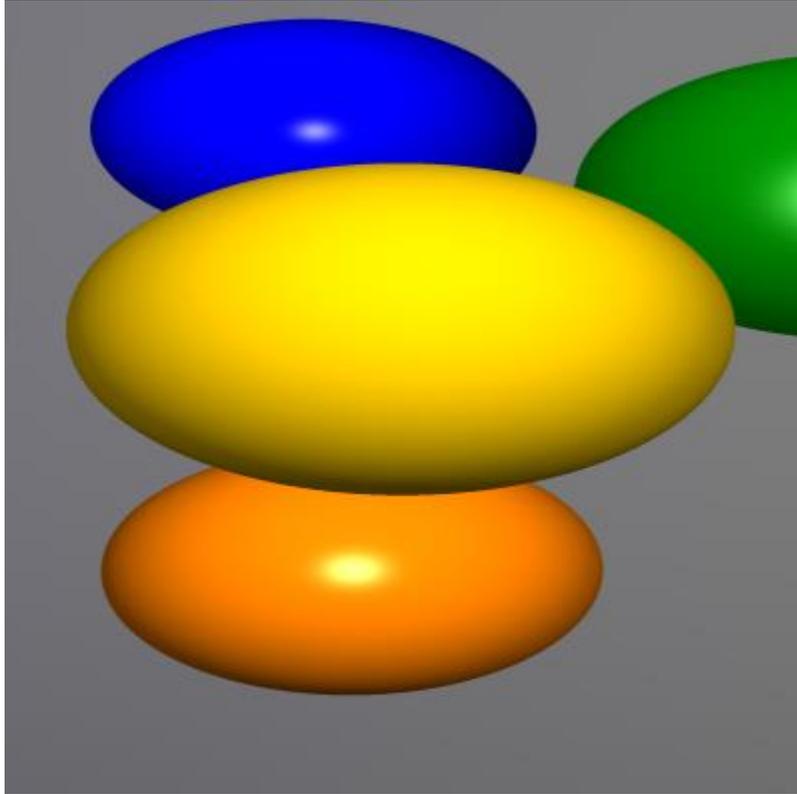
Interesting results:
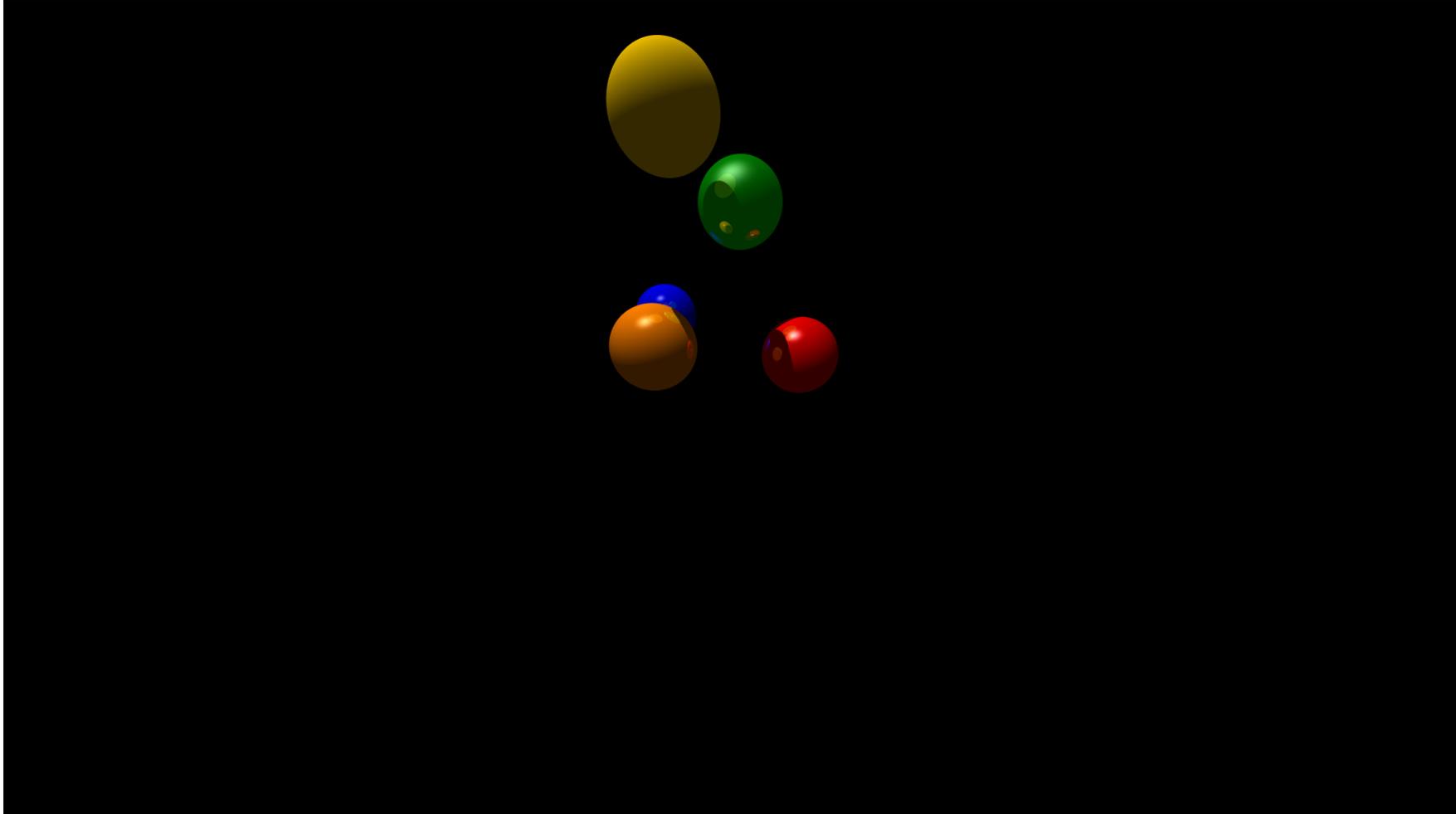
Interesting errors (last years)

Interesting errors (last years)
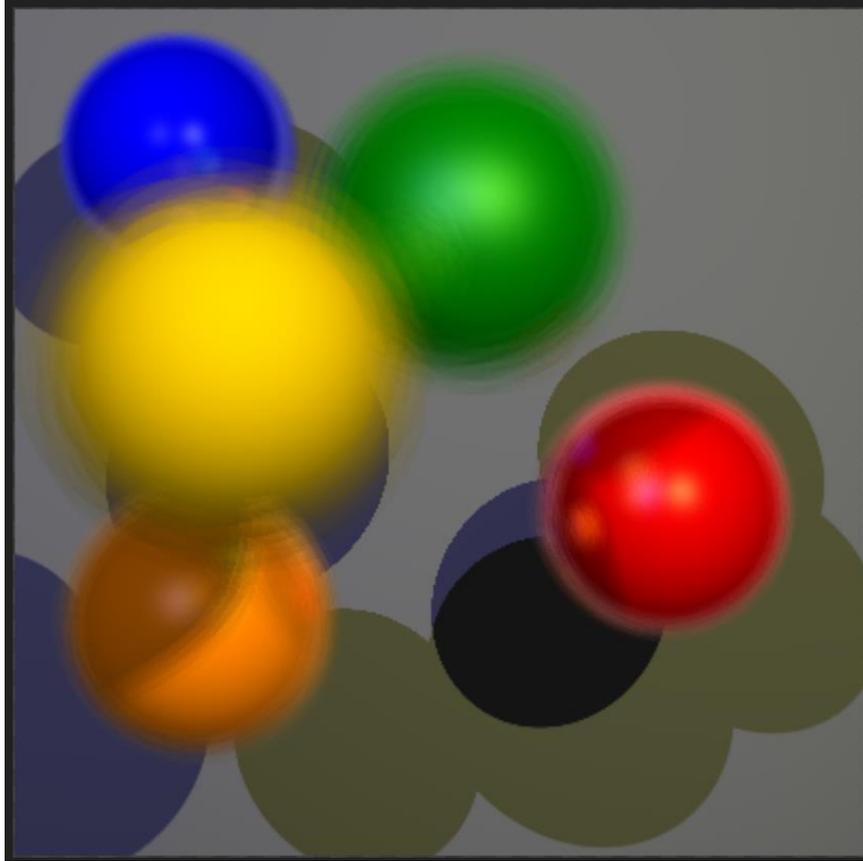
Interesting errors (last years)
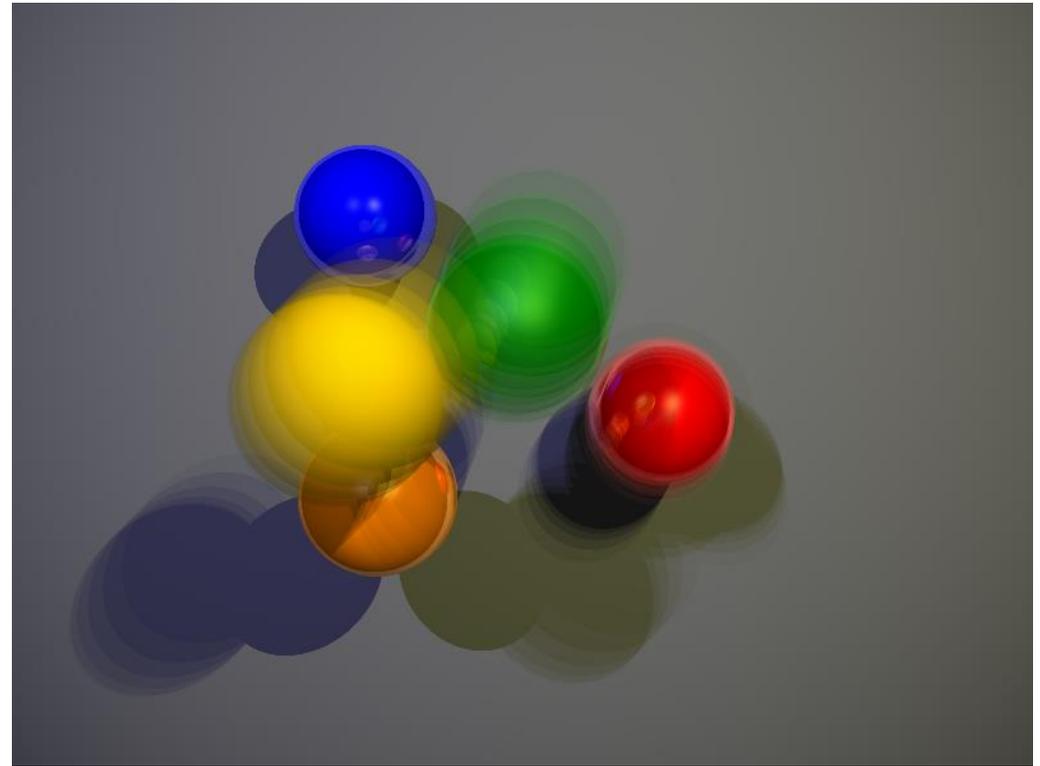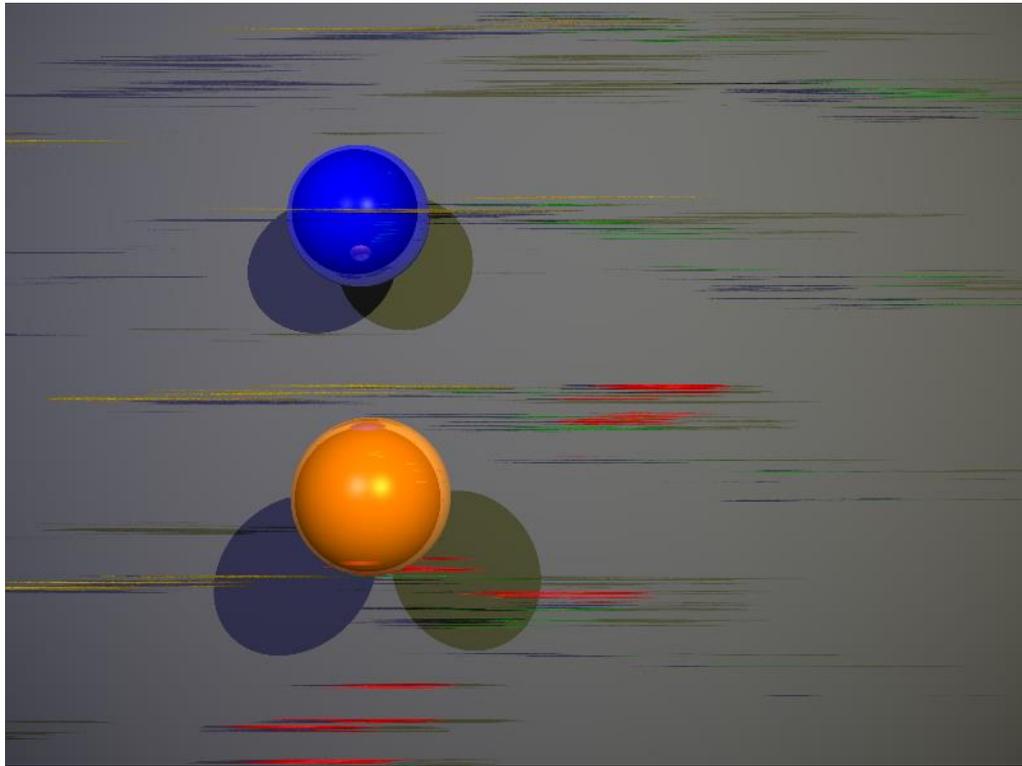
Raytracer: assignment 5

- texture mapping
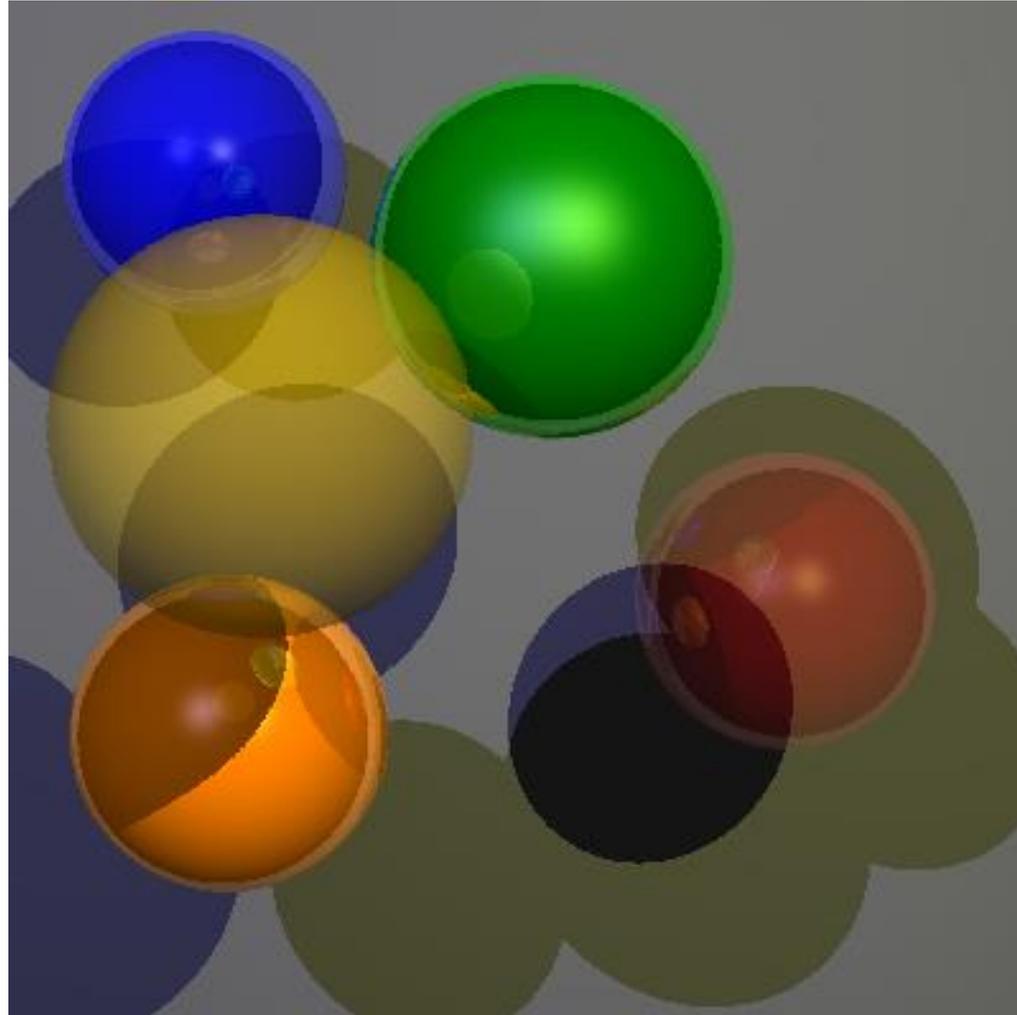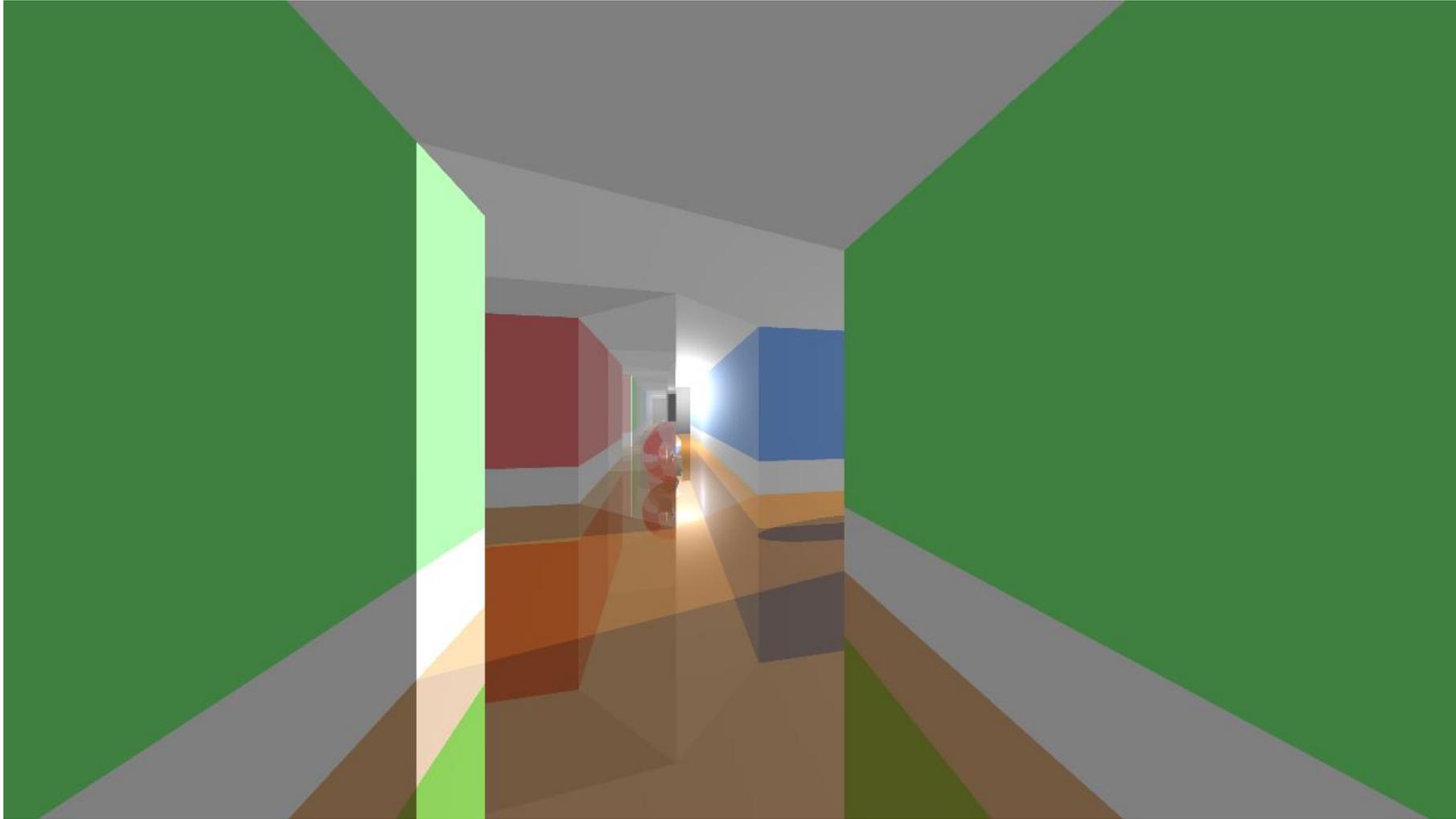 - implement texture coordinates
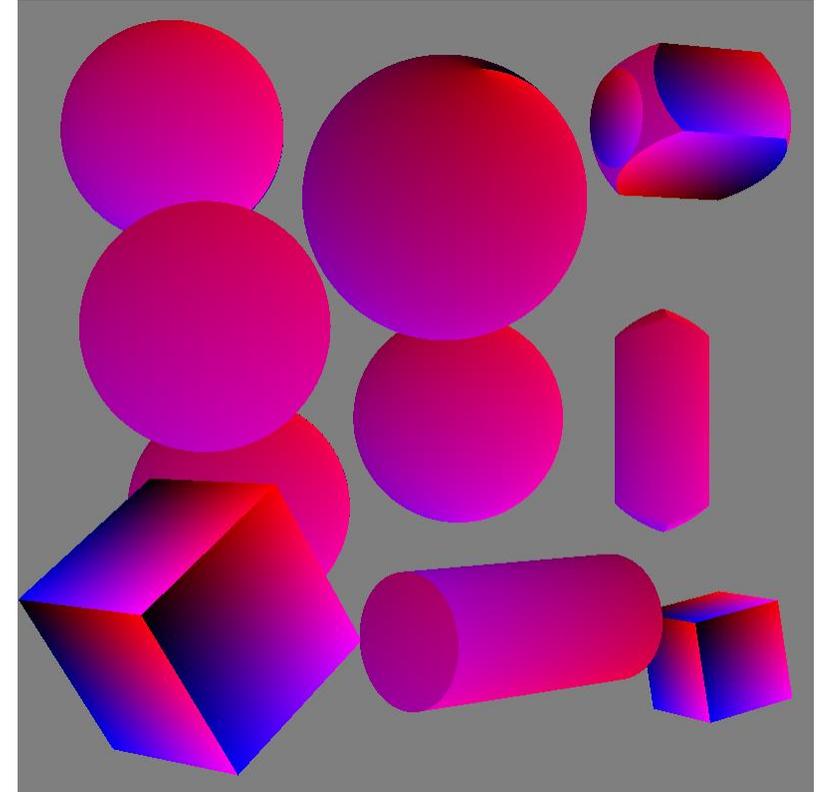
Raytracer: assignment 5

- texture mapping
  - implement (inherent) texture coordinates
  - implement texture mapping using the inherent texture coordinates
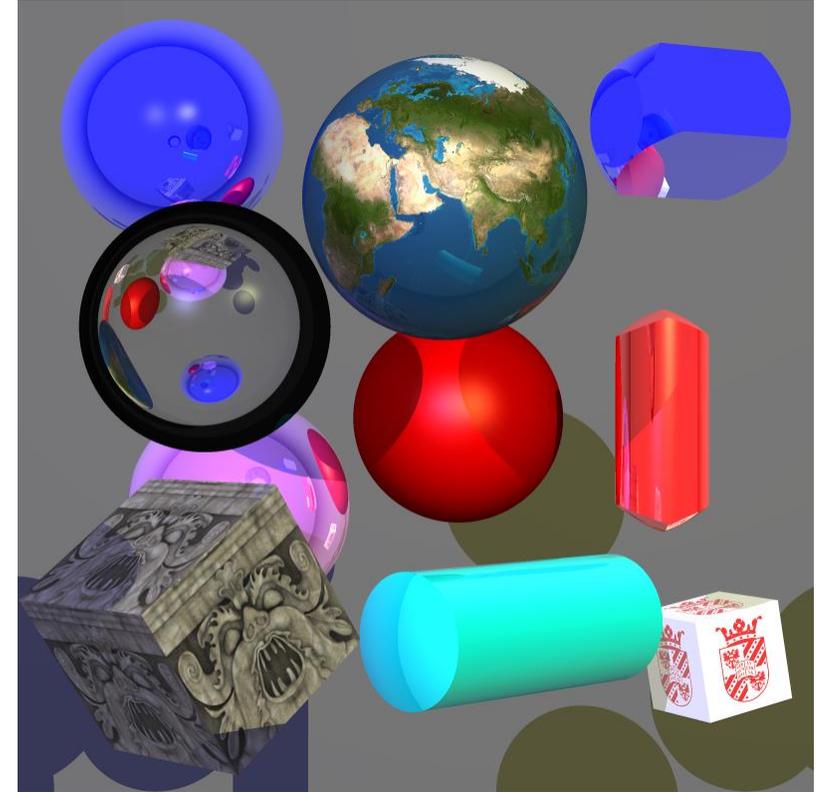
Raytracer: assignment 5

Raytracer: assignment 5
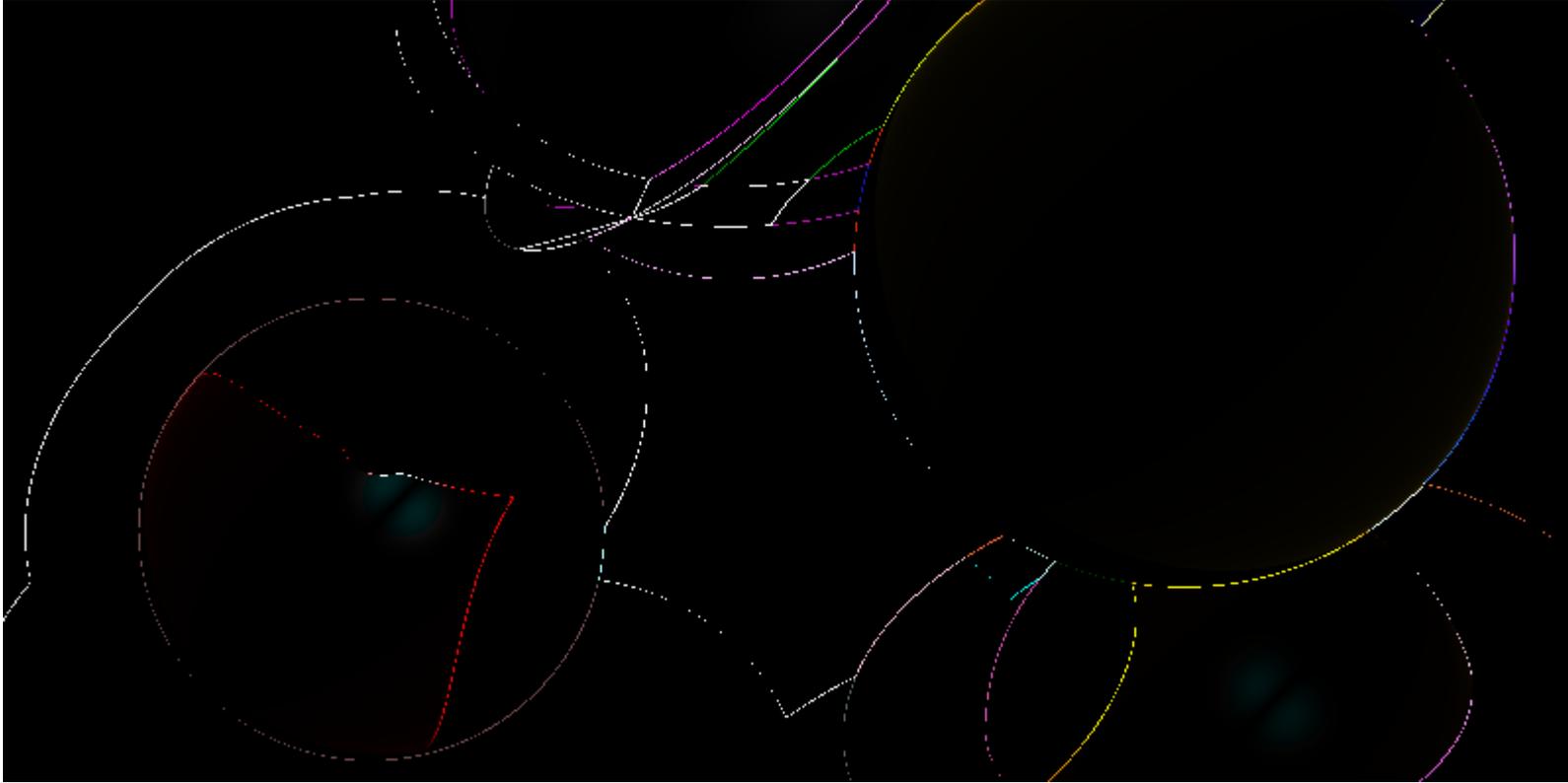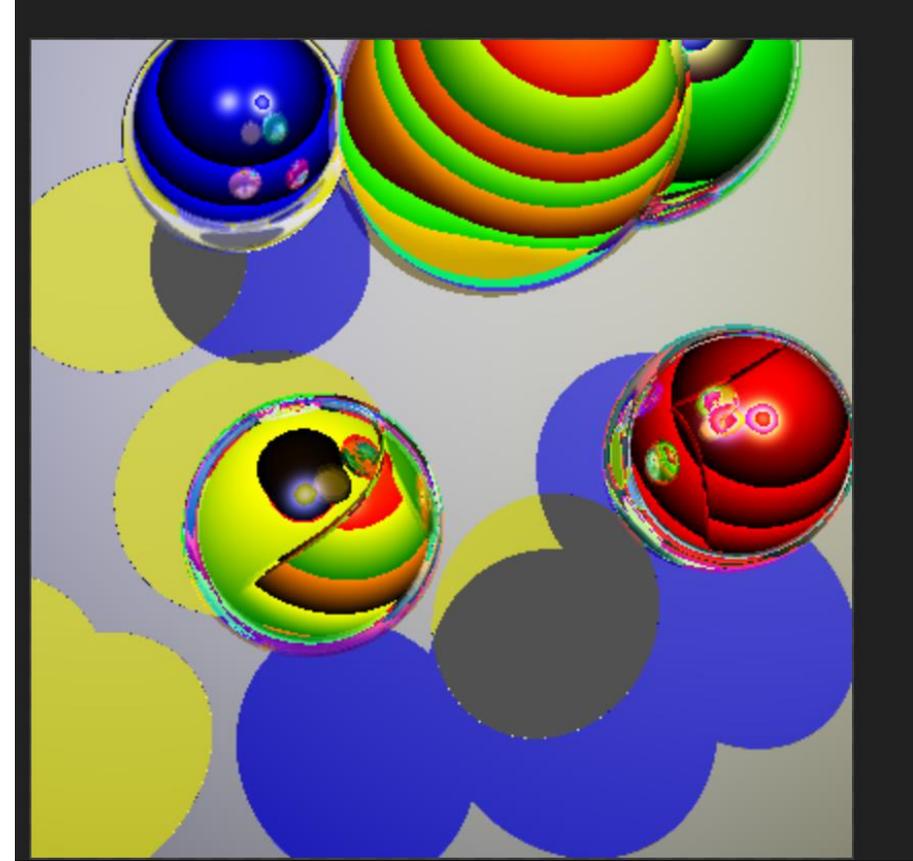
- PLEASE, PLEASE, PLEASE, a renaming of a *.jpg to a *.png does **NOT** turn a JPEG file into a PNG file; it stills starts

  ÿØÿà........

  while a PNG file should start

  ‰PNG.........

- just use proper image conversion (Gimp, ImageMagick, …)

Raytracer: assignment 5

- texture mapping
  - implement (inherent) texture coordinates
  - implement texture mapping using the inherent texture coordinates
- implement sphere rotation
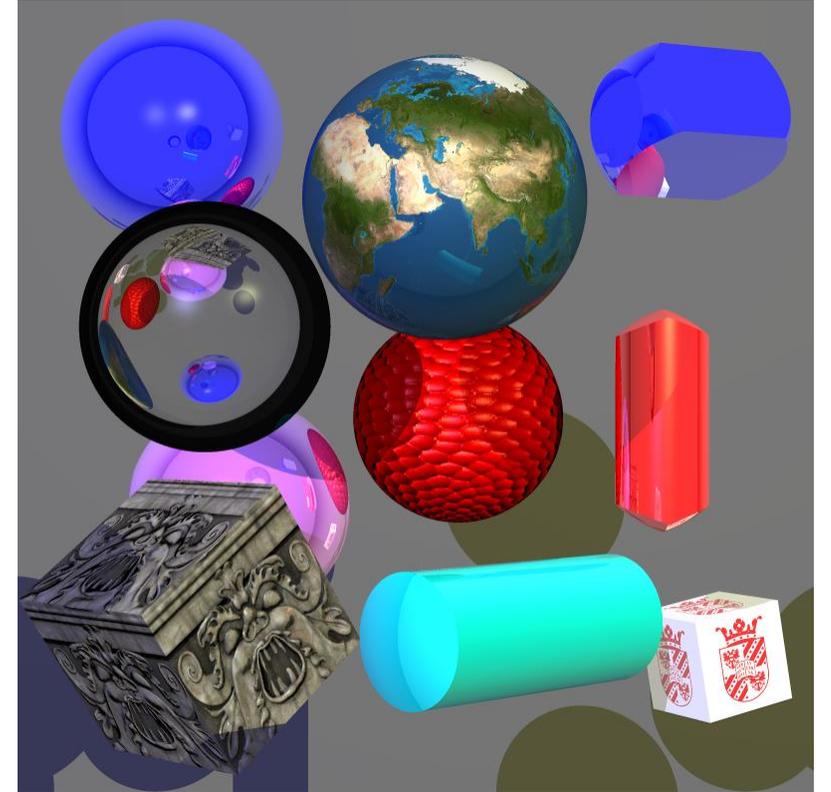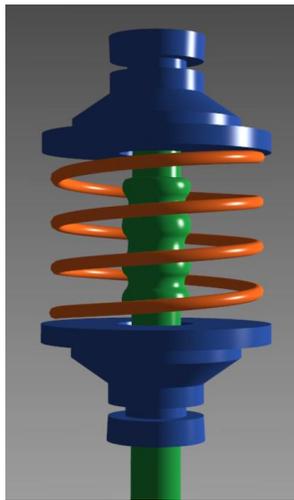
Raytracer: assignment 5

- texture mapping
  - implement (inherent)
    texture coordinates
  - implement texture mapping
    using the inherent texture coordinates
- implement sphere rotation
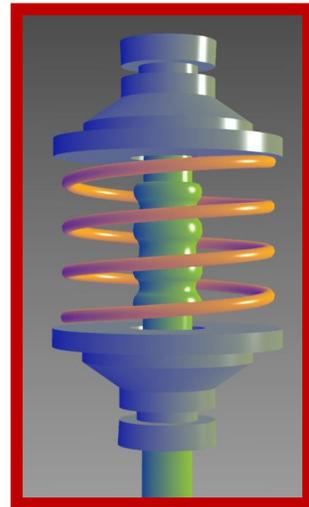- bonus
  - bump mapping

Raytracer: assignment 5

- alternative illumination model
  - Gooch illumination for better illustration of shape
    (only cool-to-warm shading, not the outlines)

Phong

Gooch model

Gooch model plus lines