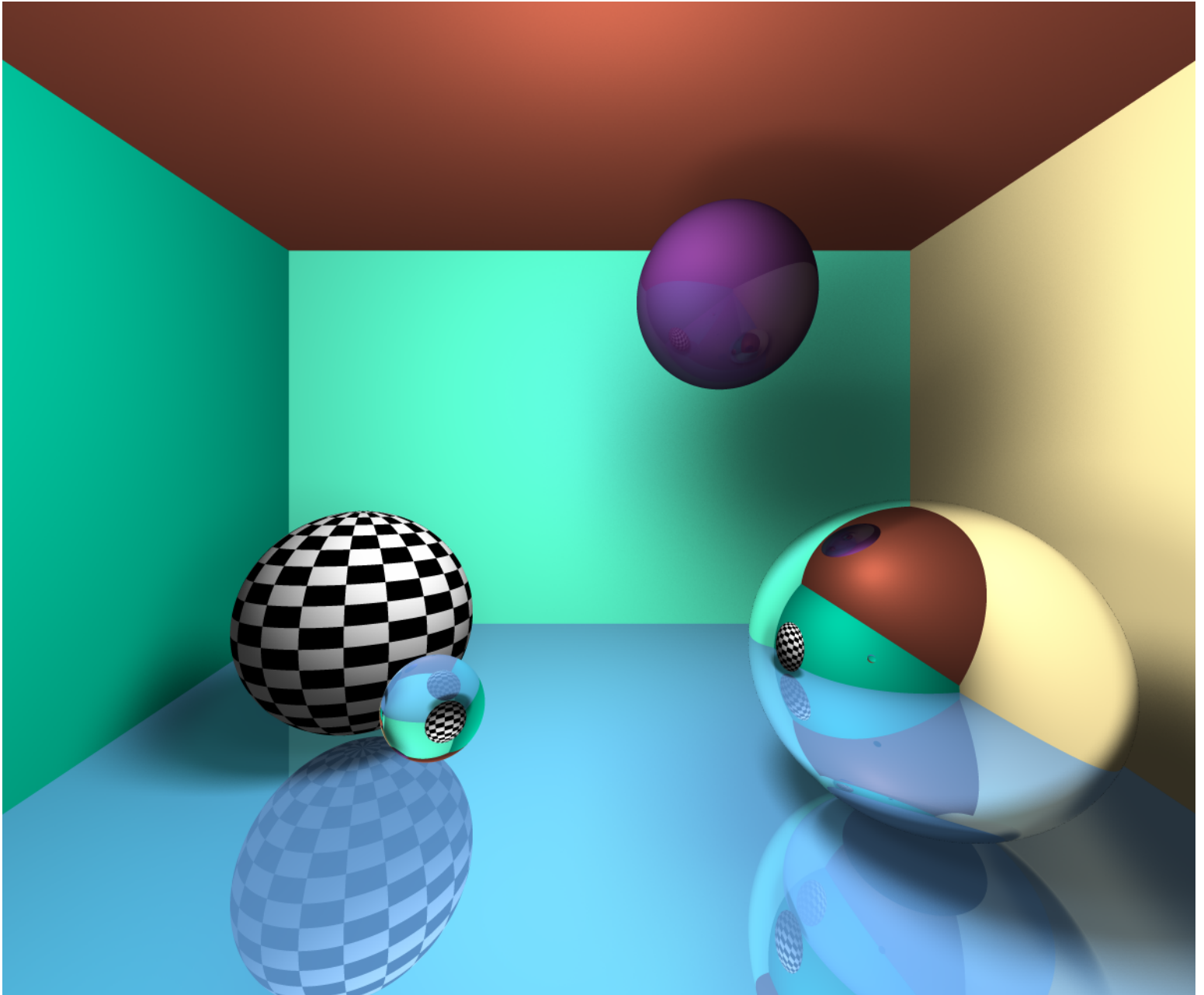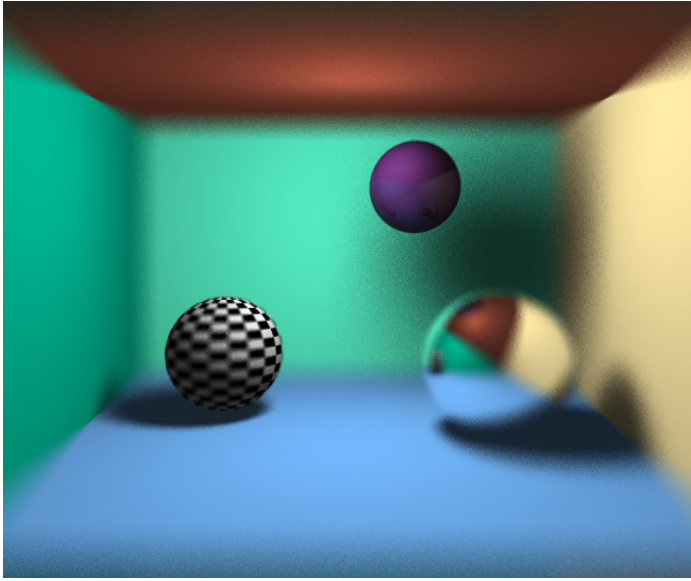# 3GC3 Final Project

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Figure 1: Reflective floor, 100% transparent sphere showing refraction, checkered sphere with texture mapping, mirror sphere. 64x random sampled anti-aliasing with 300 iterations for soft shadows. 13h50m of CPU time.
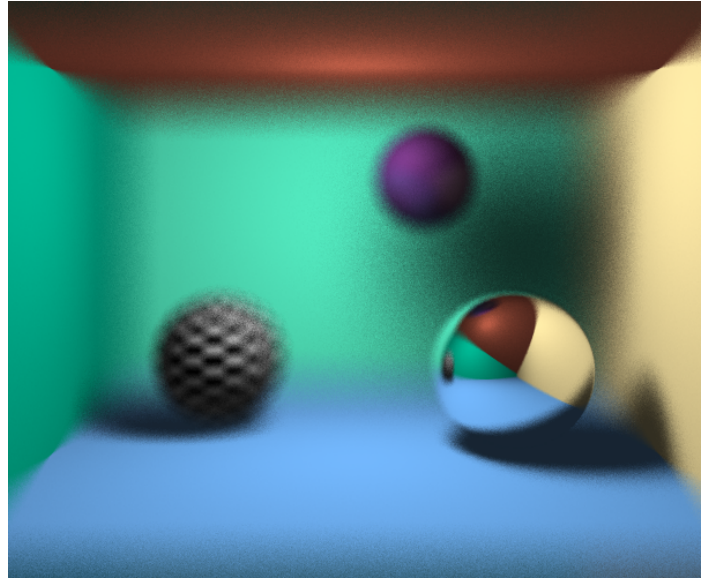
Contents

1   Scene Files

2   Depth of Field

(a) `DepthOfField.scene`   (b) `DepthOfField2.scene`

Figure 2: A scene displayed with two different focal points. Minimal noise reduction, could be increased.

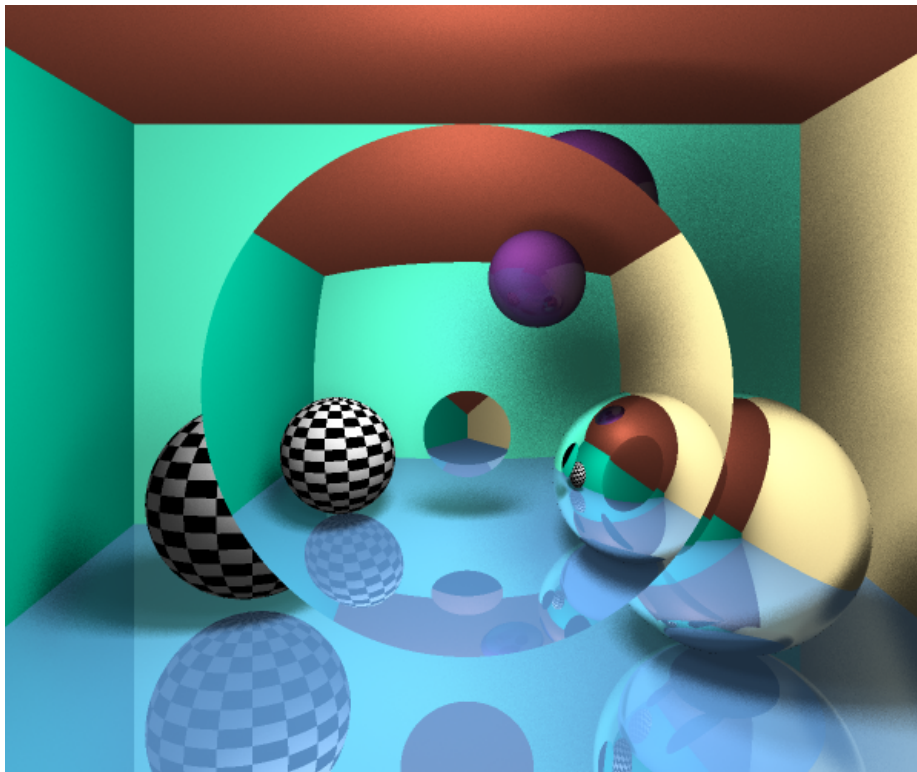# 3   Soft Shadows

TODO

4   Refraction

Figure 3: `DiskLens.scene`. A 100% transparent disk with a refractive index of 2.5 placed in front of the scene.

5   Objects

5.1   Types

TODO
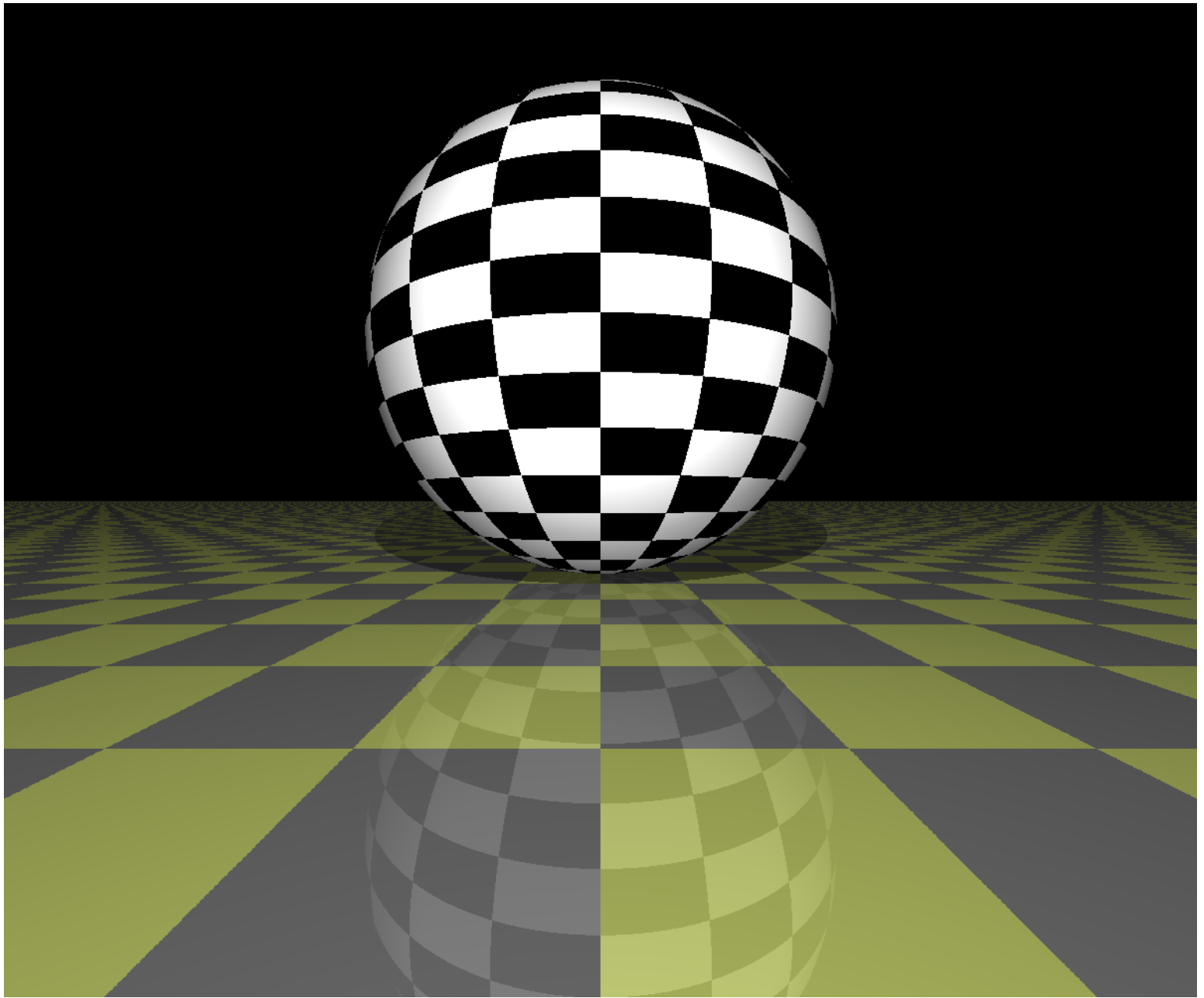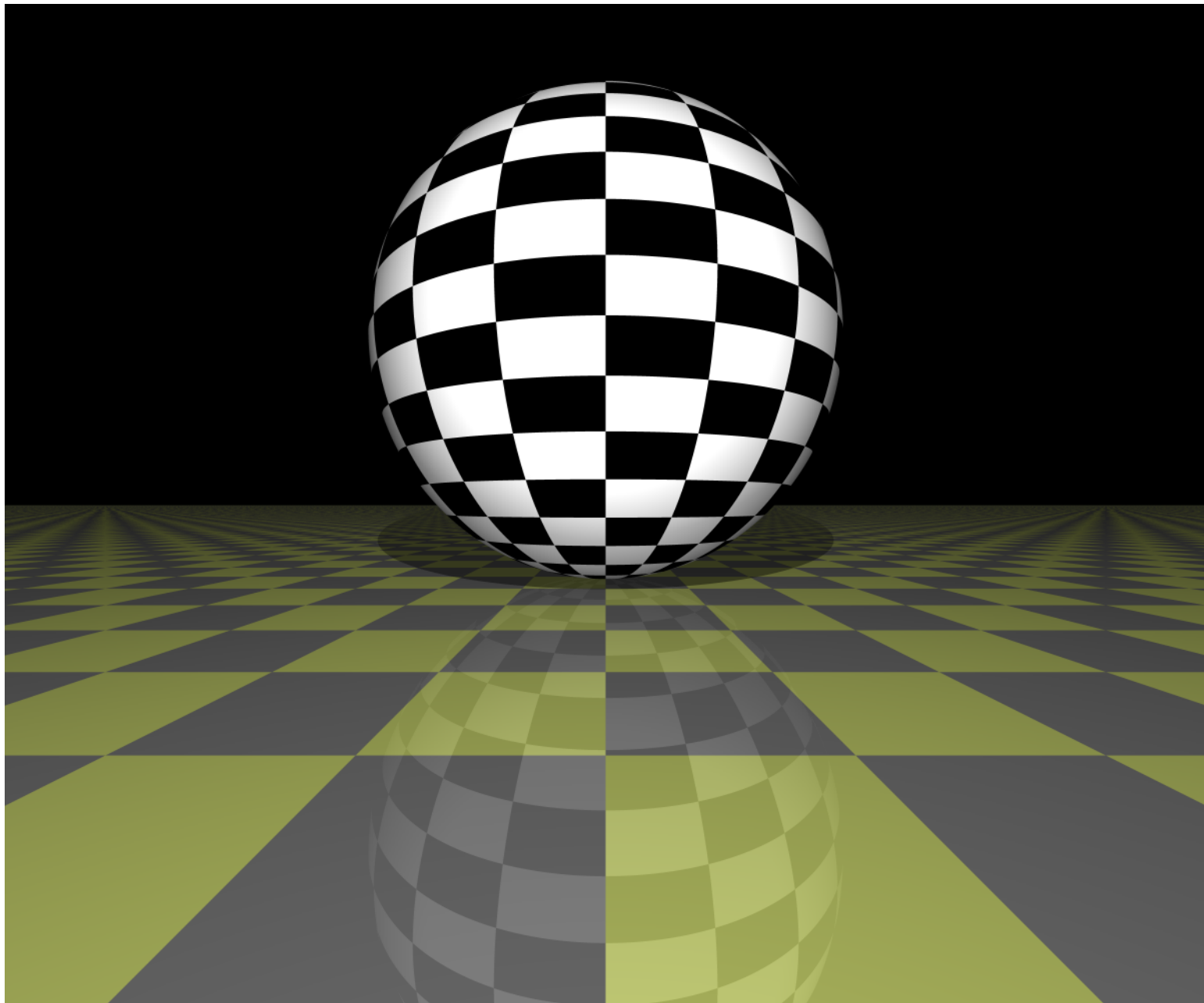
5.2   Texture

TODO

6 Anti-Aliasing

Figure 4: No anti-aliasing.

Figure 5: 64x AA using regular sampling.
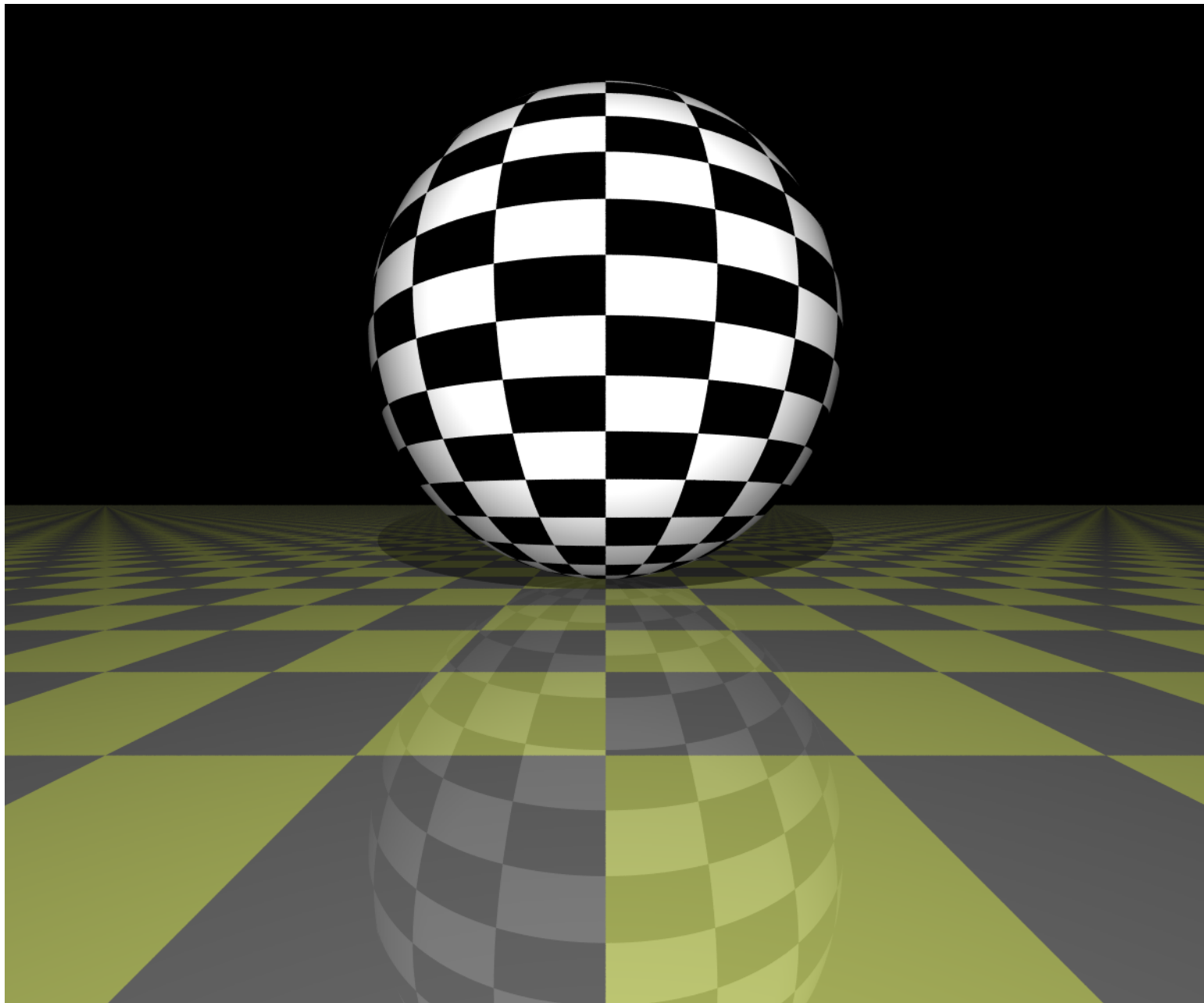
Figure 6: 64x AA using random sampling.
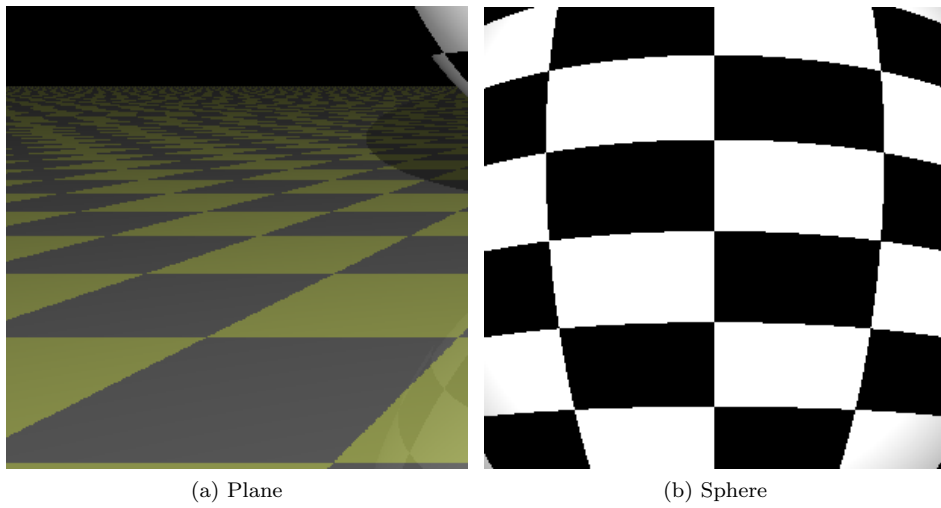
(a) Plane

(b) Sphere

Figure 7: Vanishing plane and checkered sphere without anti-aliasing.
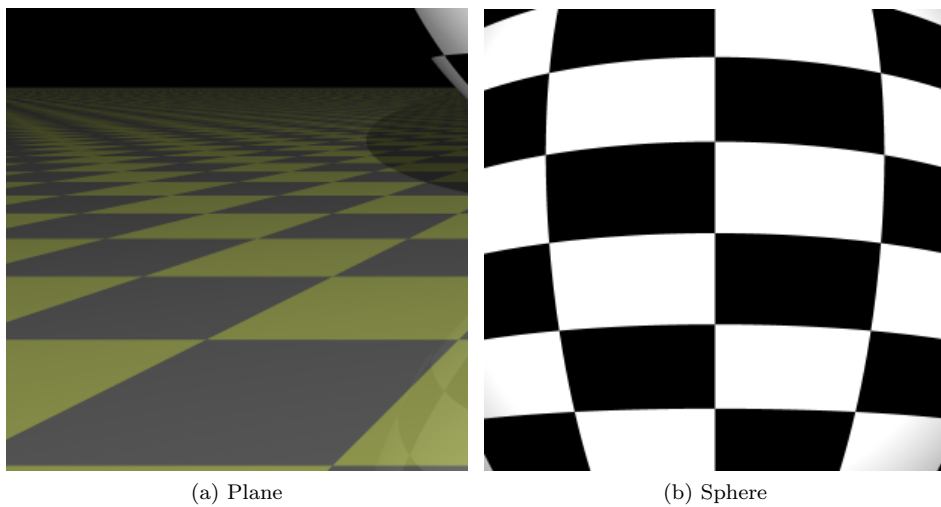

(a) Plane

(b) Sphere

Figure 8: Vanishing plane and checkered sphere with 64x AA using regular sampling.

(a) Plane

(b) Sphere

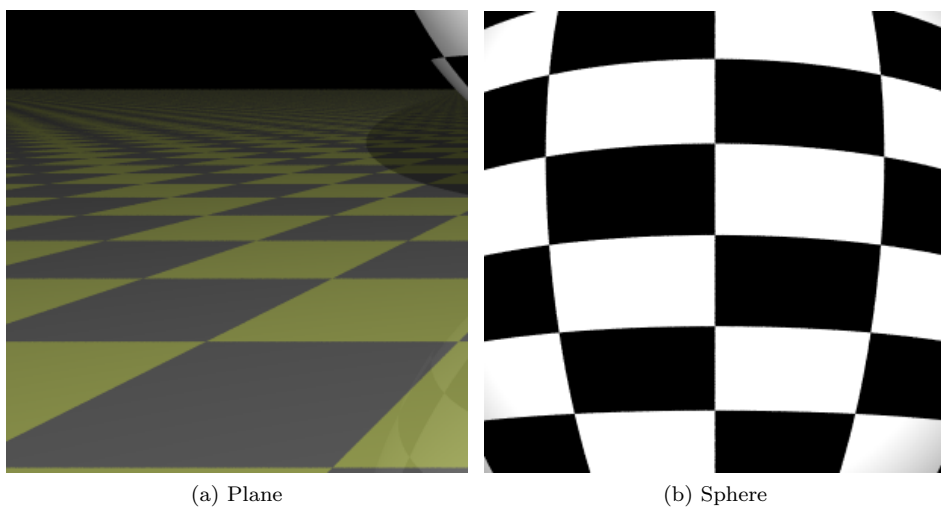Figure 9: Vanishing plane and checkered sphere with 64x AA using random sampling.

7   References

These items are referred to throughout the codebase.