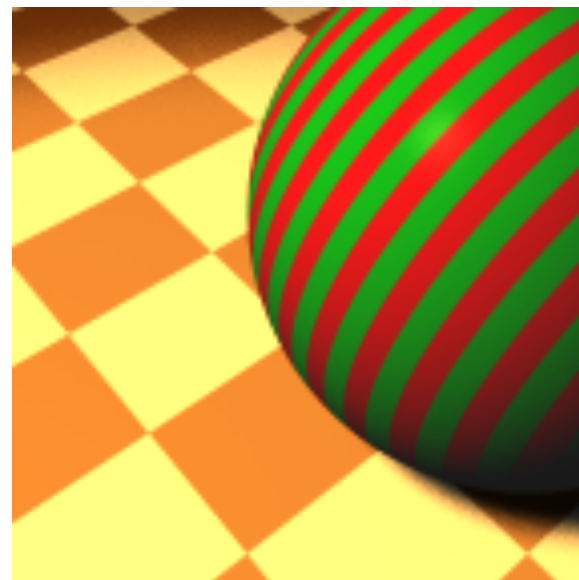
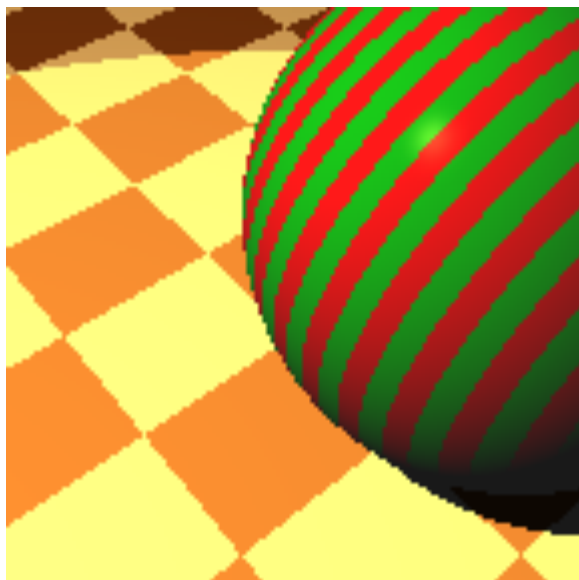
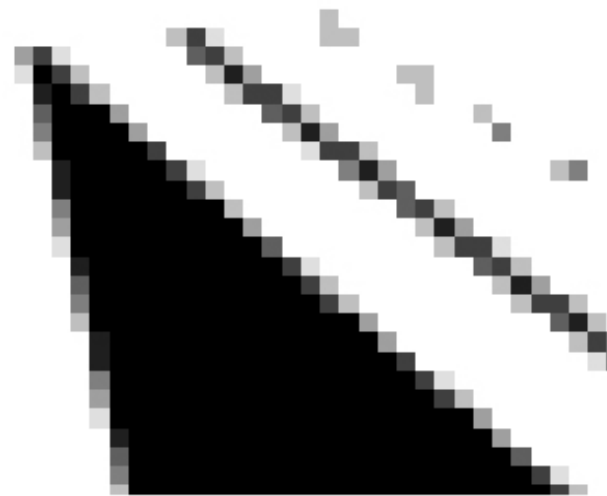
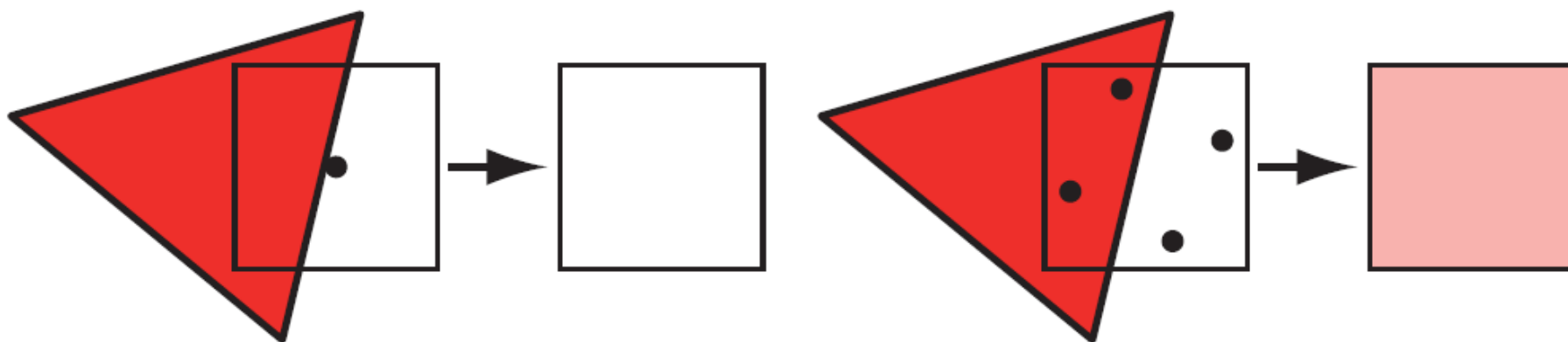


Распределенная трассировка лучей.

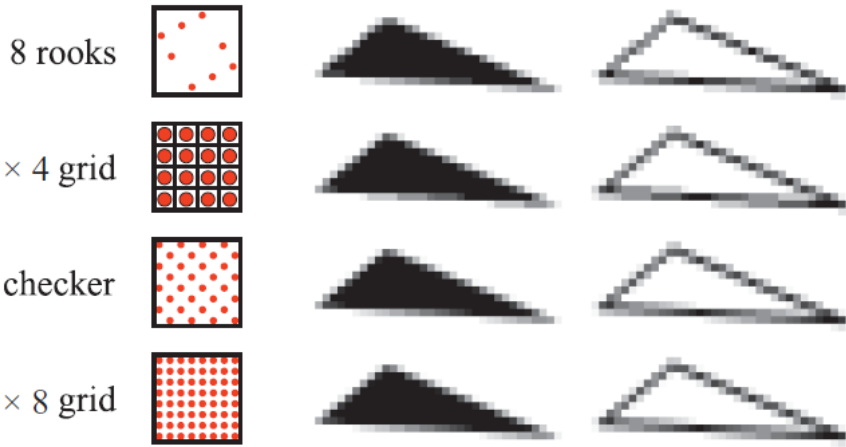
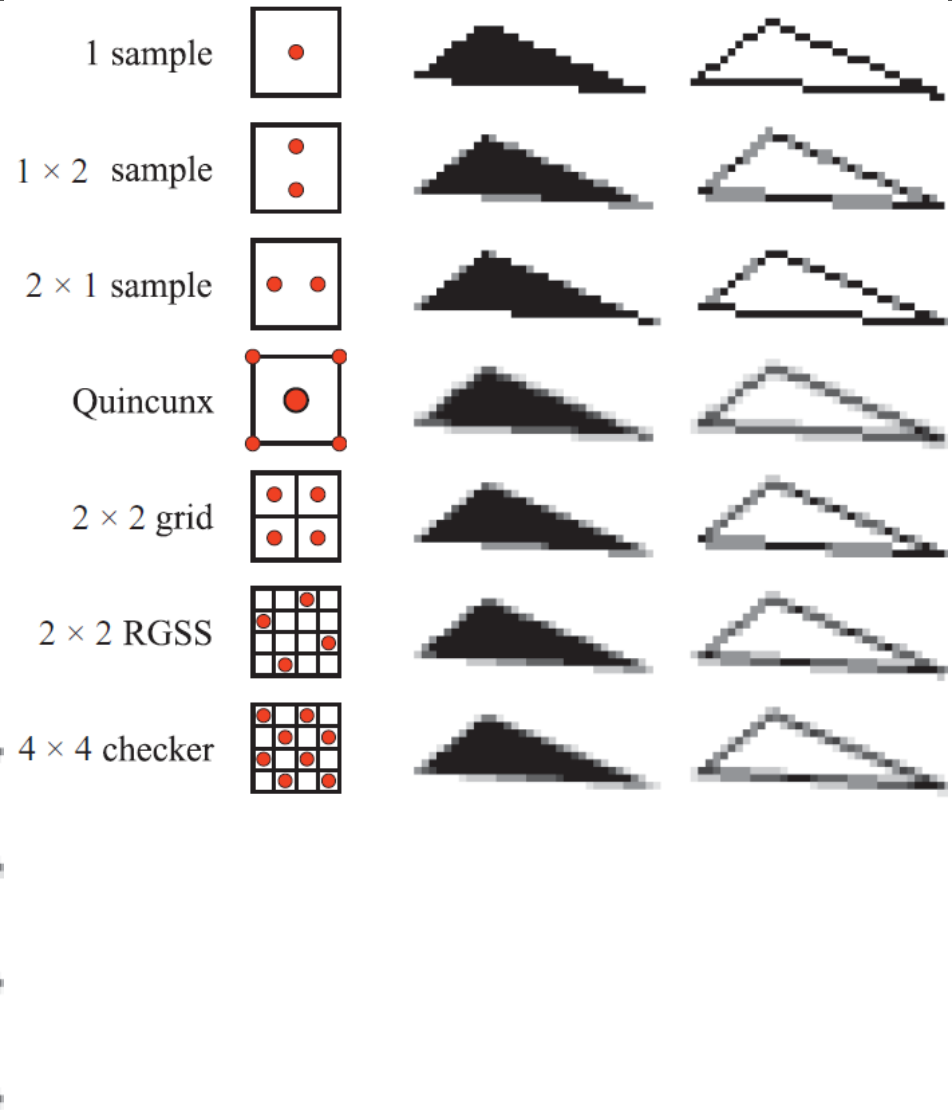
URL: <http://www.school30.spb.ru/cgsg/cgc/>

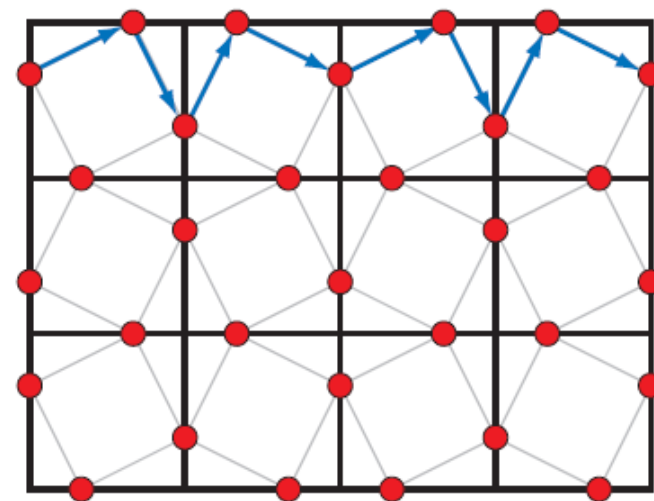
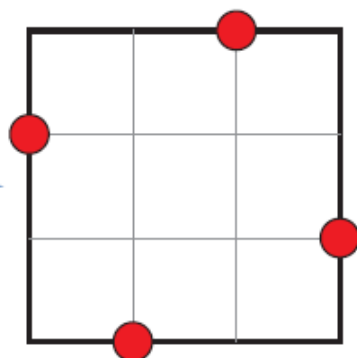
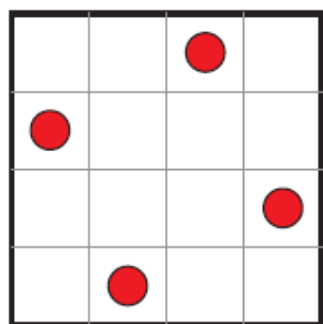
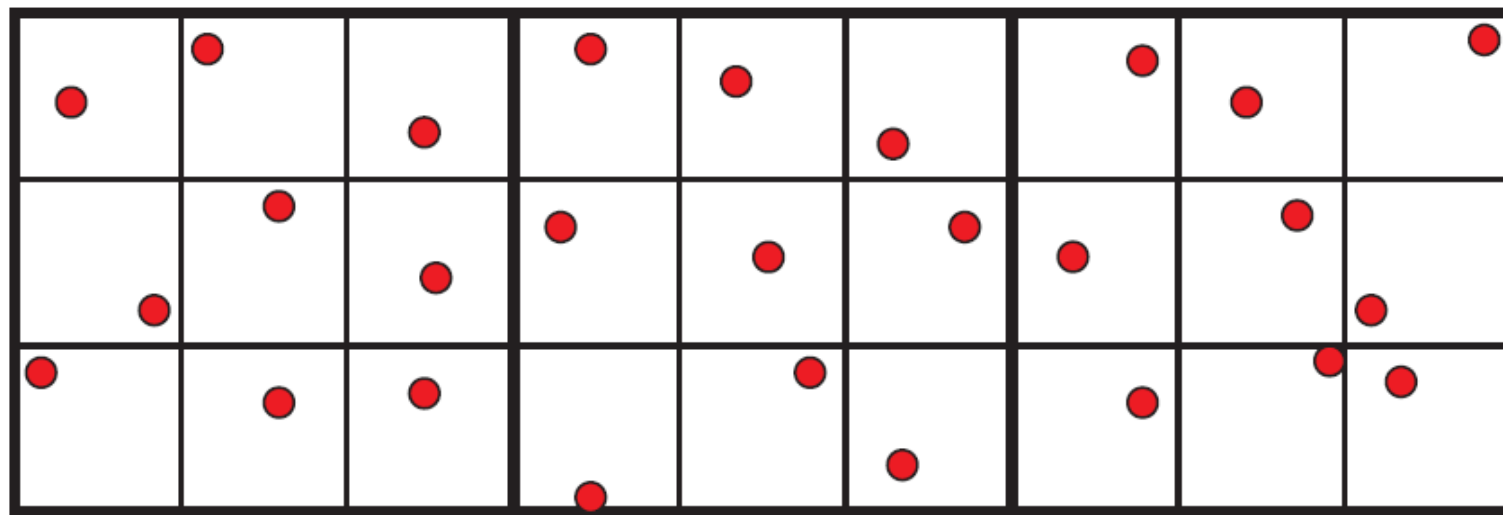
E-mail: CGSG@yandex.ru

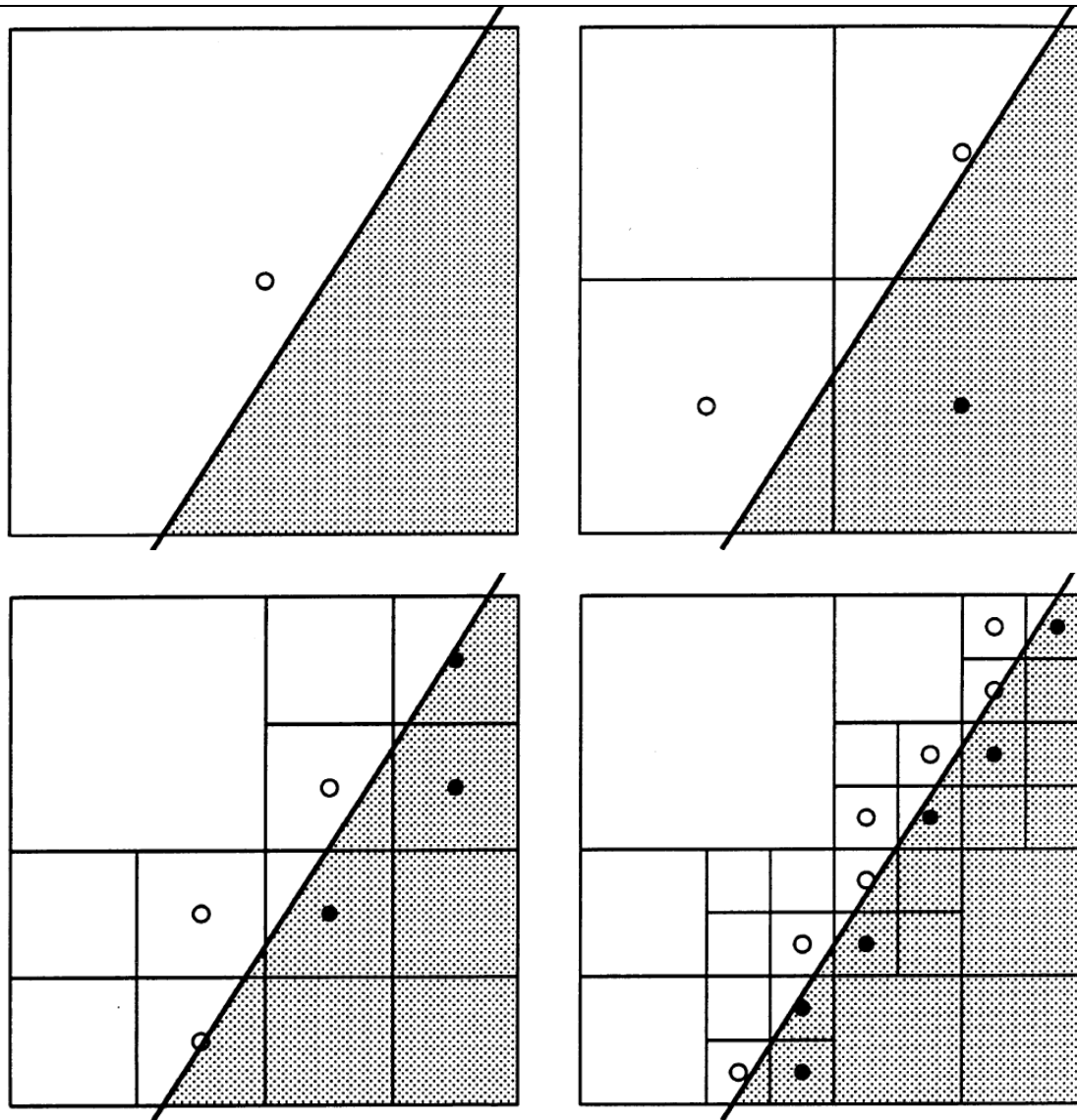


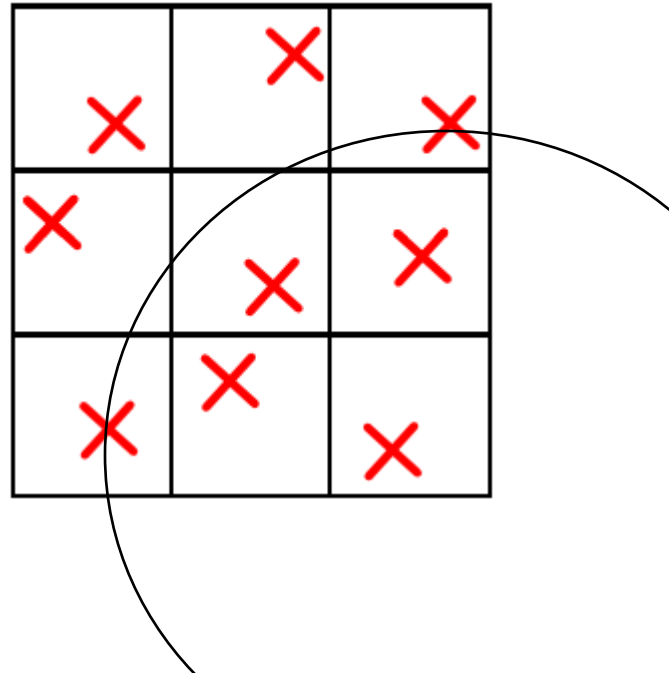


$$p(x, y) = \sum_{i=1}^n w_i c(i, x, y)$$





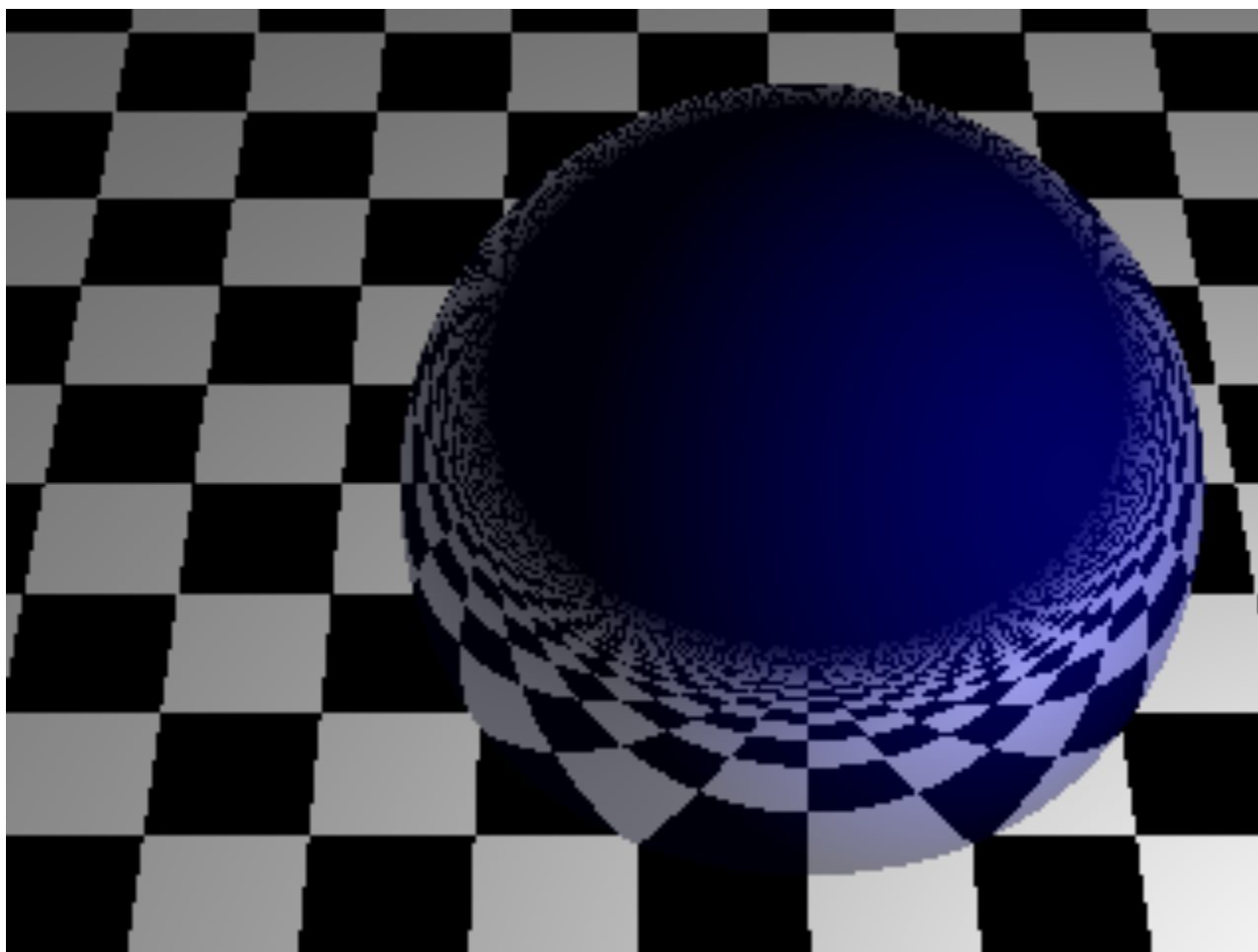


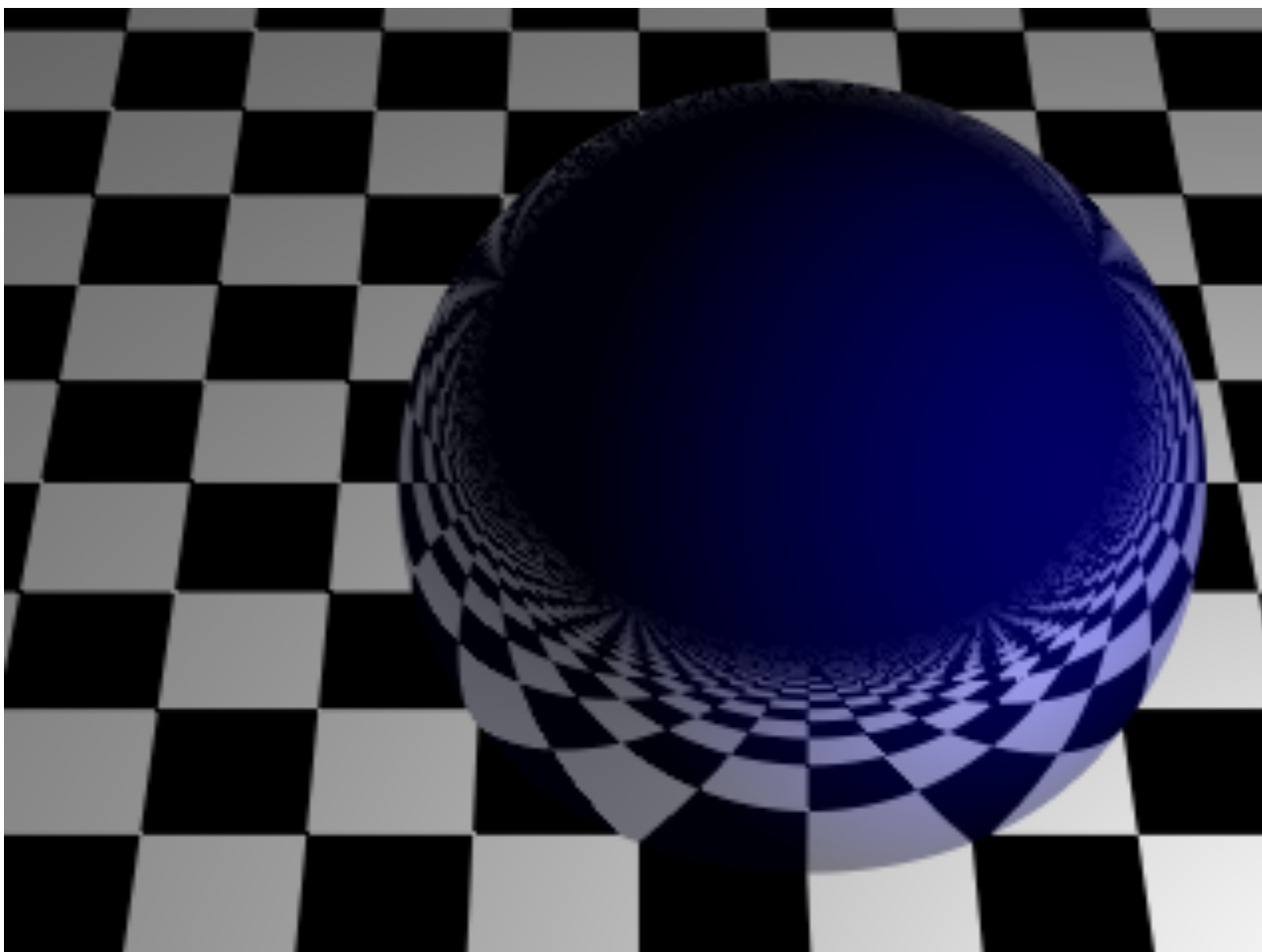


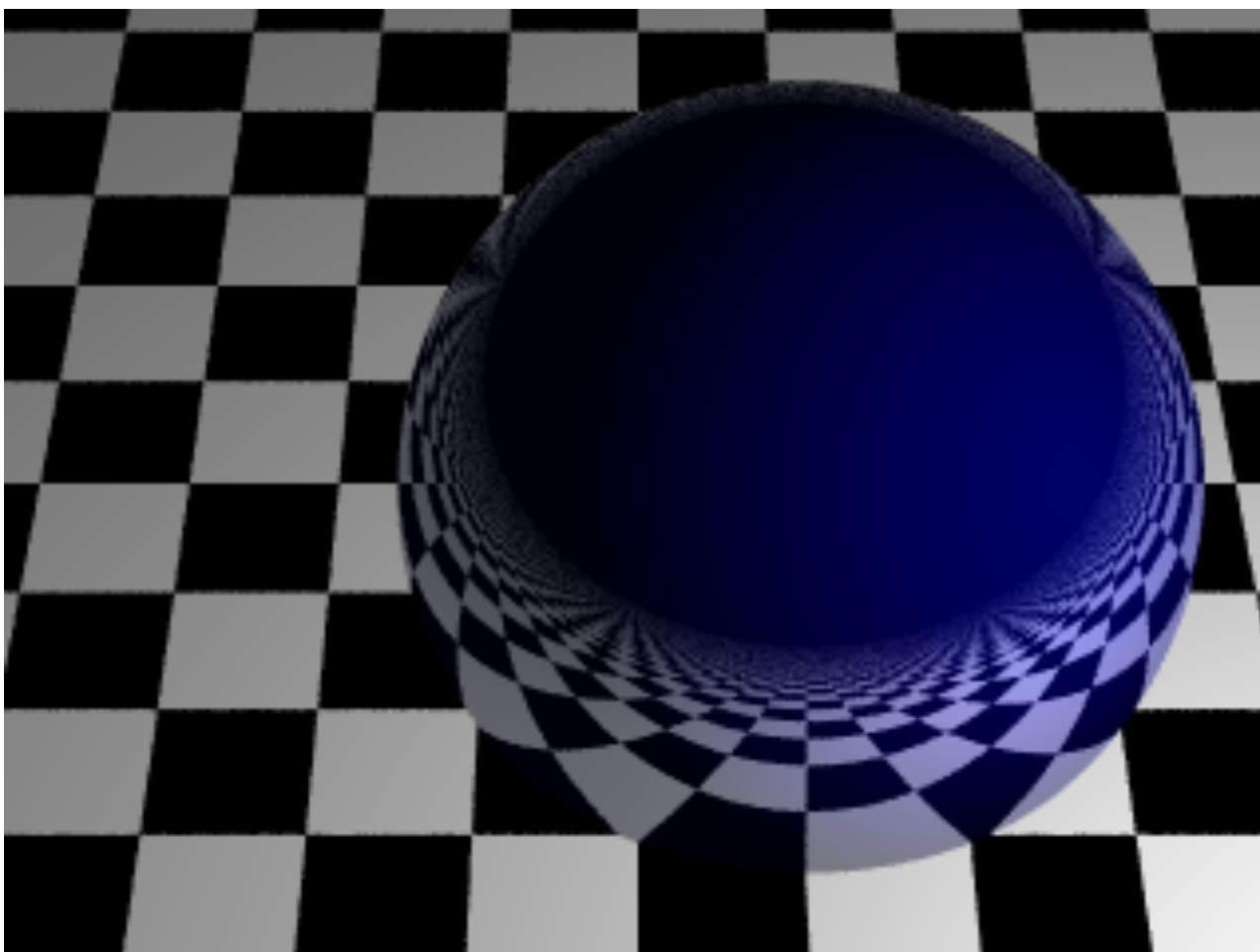
$$\sigma^2 = \frac{1}{n-1} \cdot \sum_{i=1}^n (C_i - \bar{C})^2 = \frac{n}{n-1} \cdot \left(\frac{1}{n} \sum_{i=1}^n C_i^2 - \left(\frac{1}{n} \sum_{i=1}^n C_i \right)^2 \right)$$

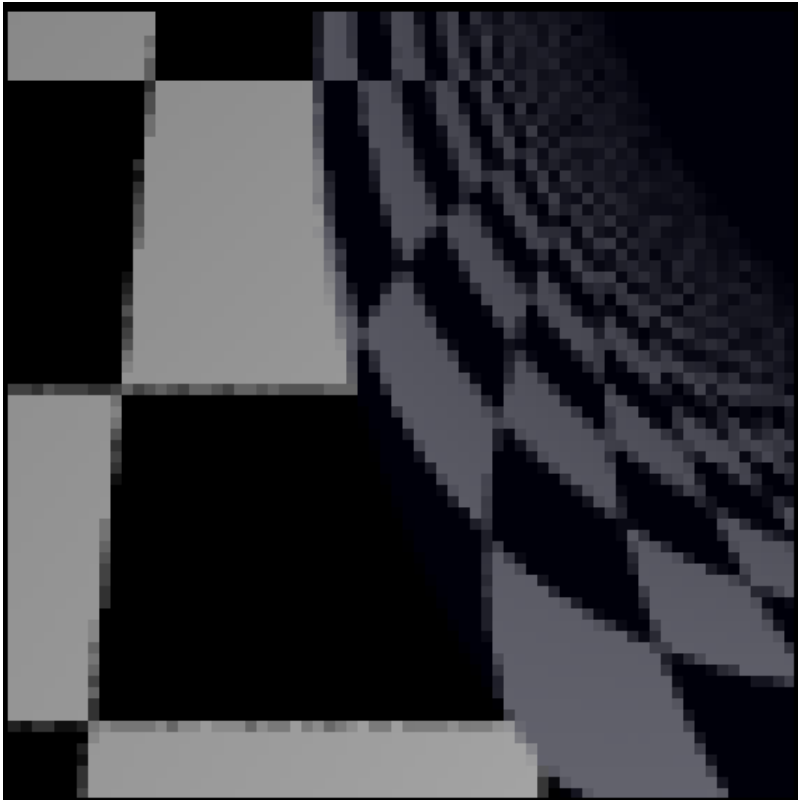
2	6	8
7	0	3
4	1	5

6	10	2	13
3	14	12	8
15	0	7	11
5	9	4	1

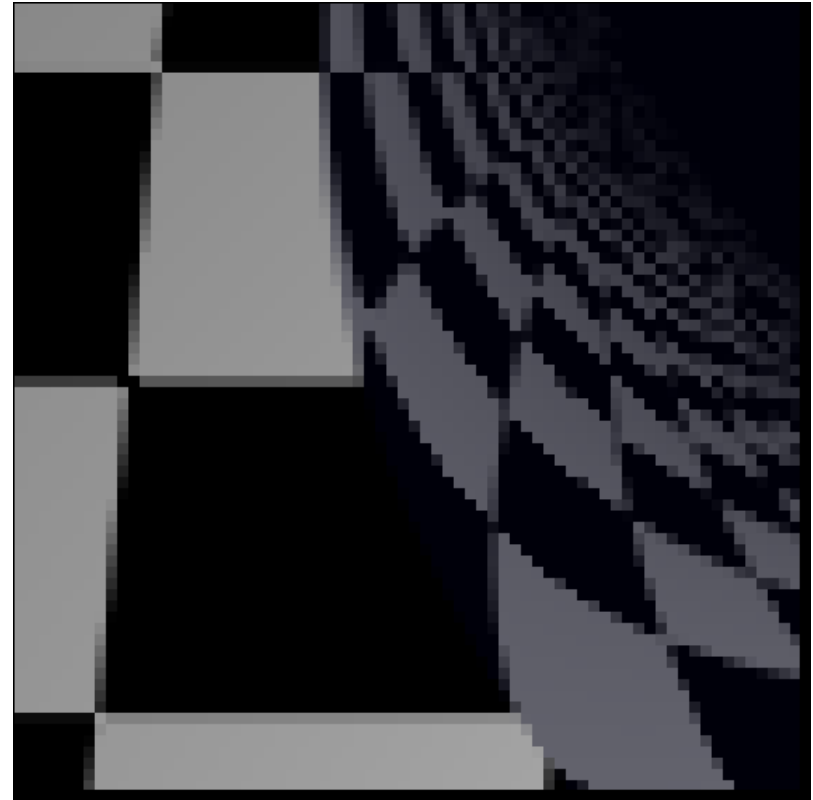




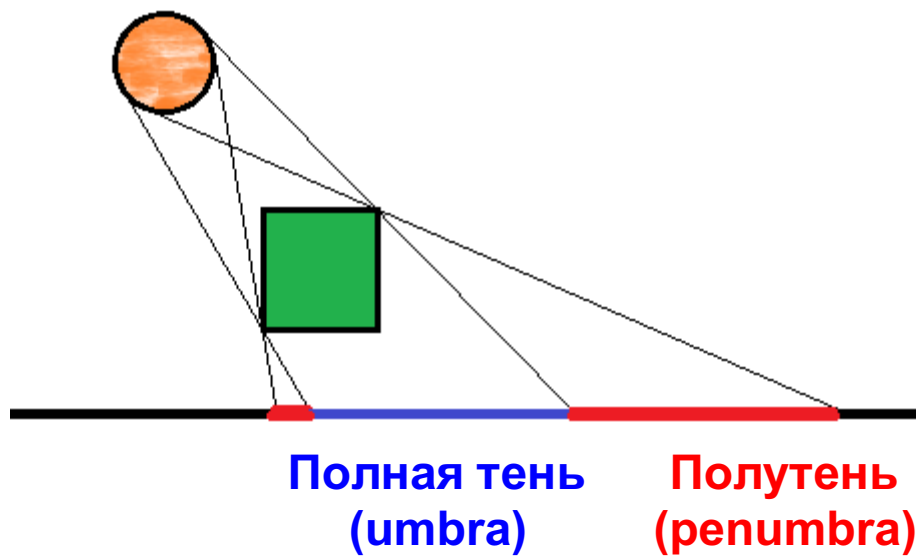




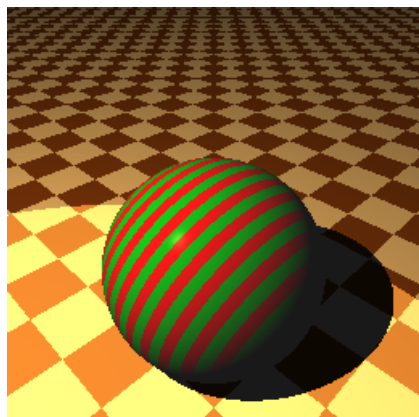
Jitter



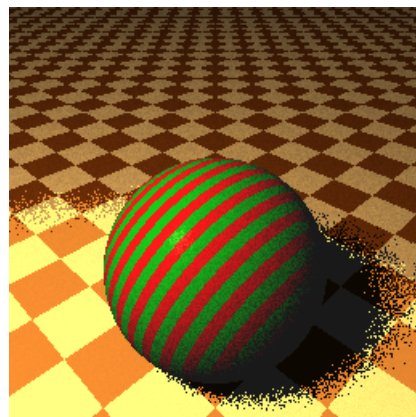
Supersampling



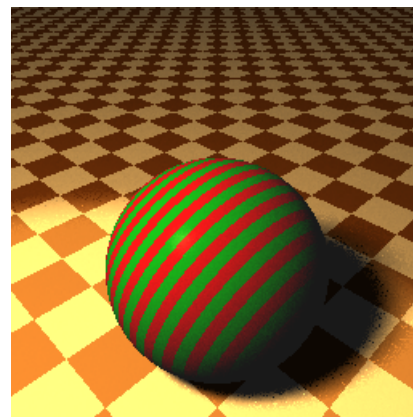
Объемные источники света - jittering



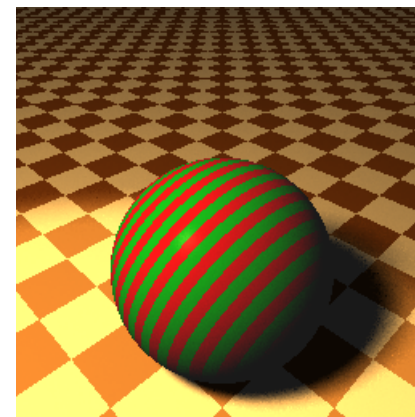
Точечный источник



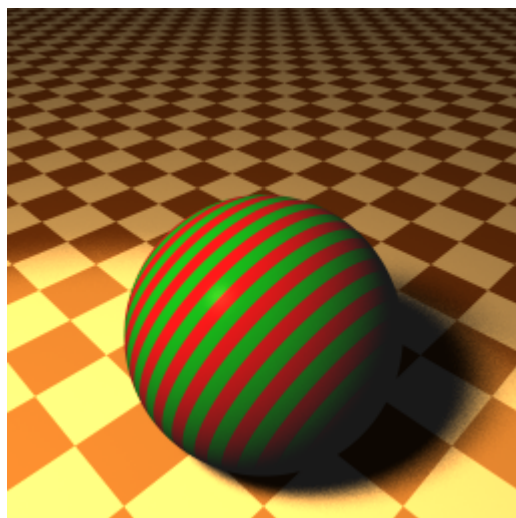
Без jittering



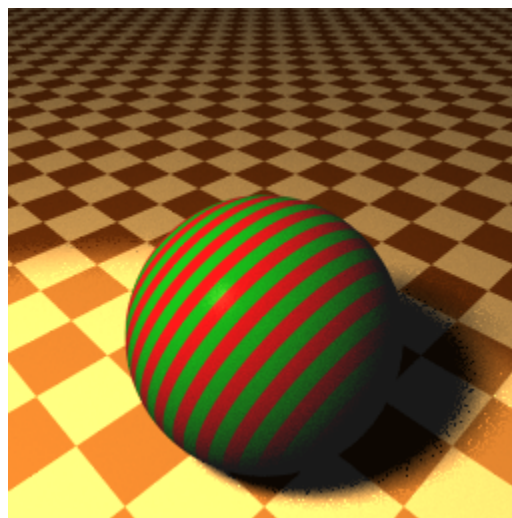
Sampling 3x3



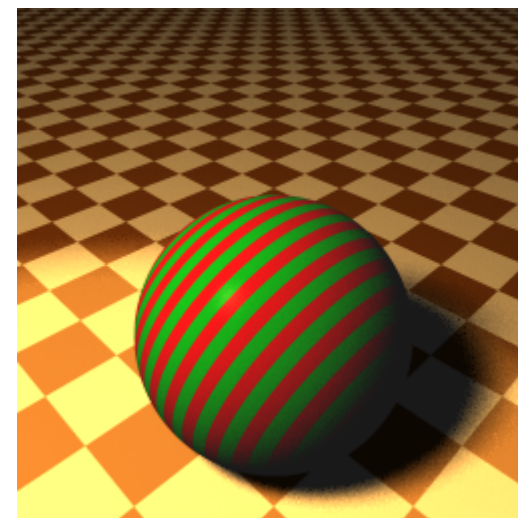
Sampling 5x5



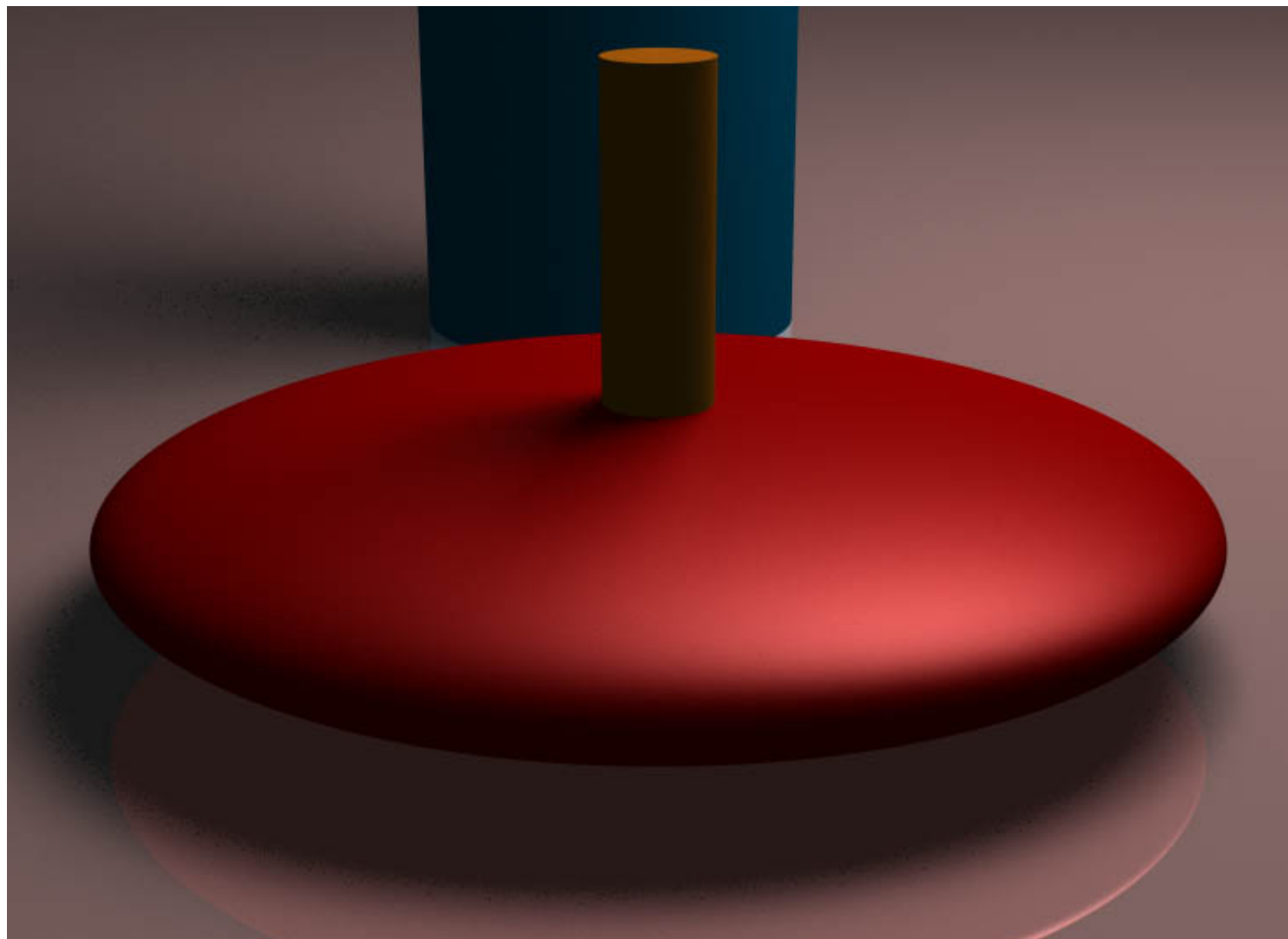
Jittering 15x15

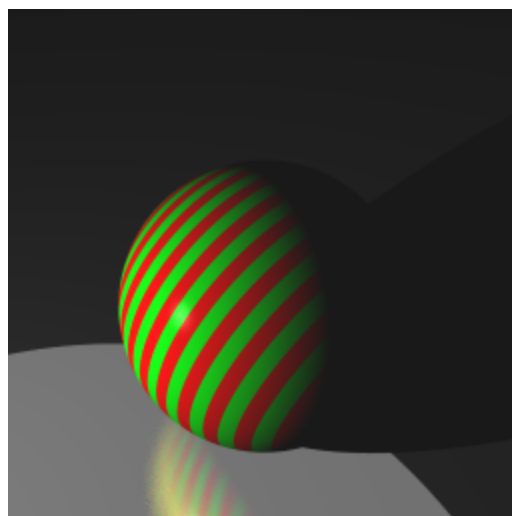
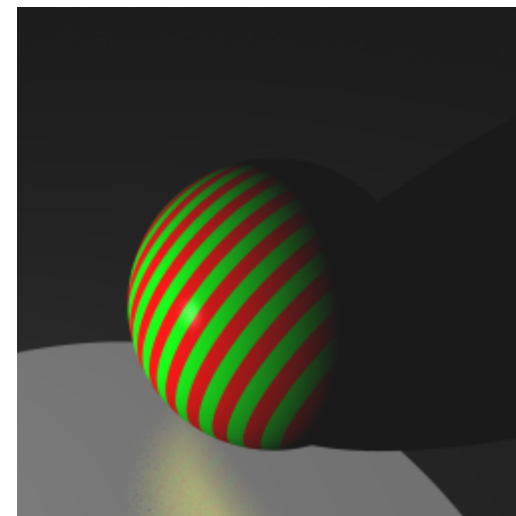
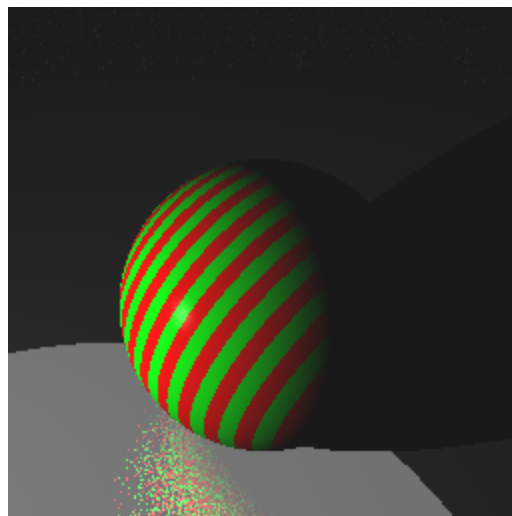
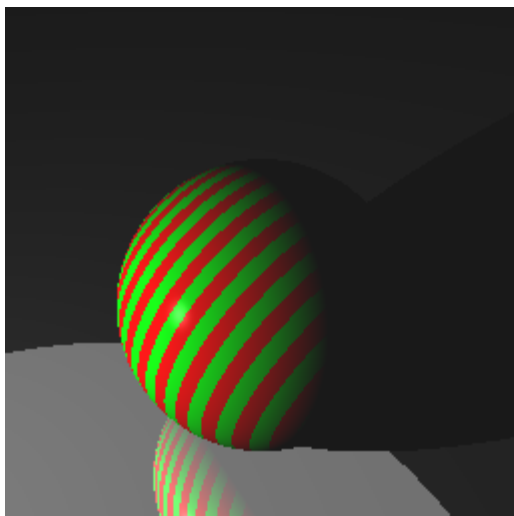


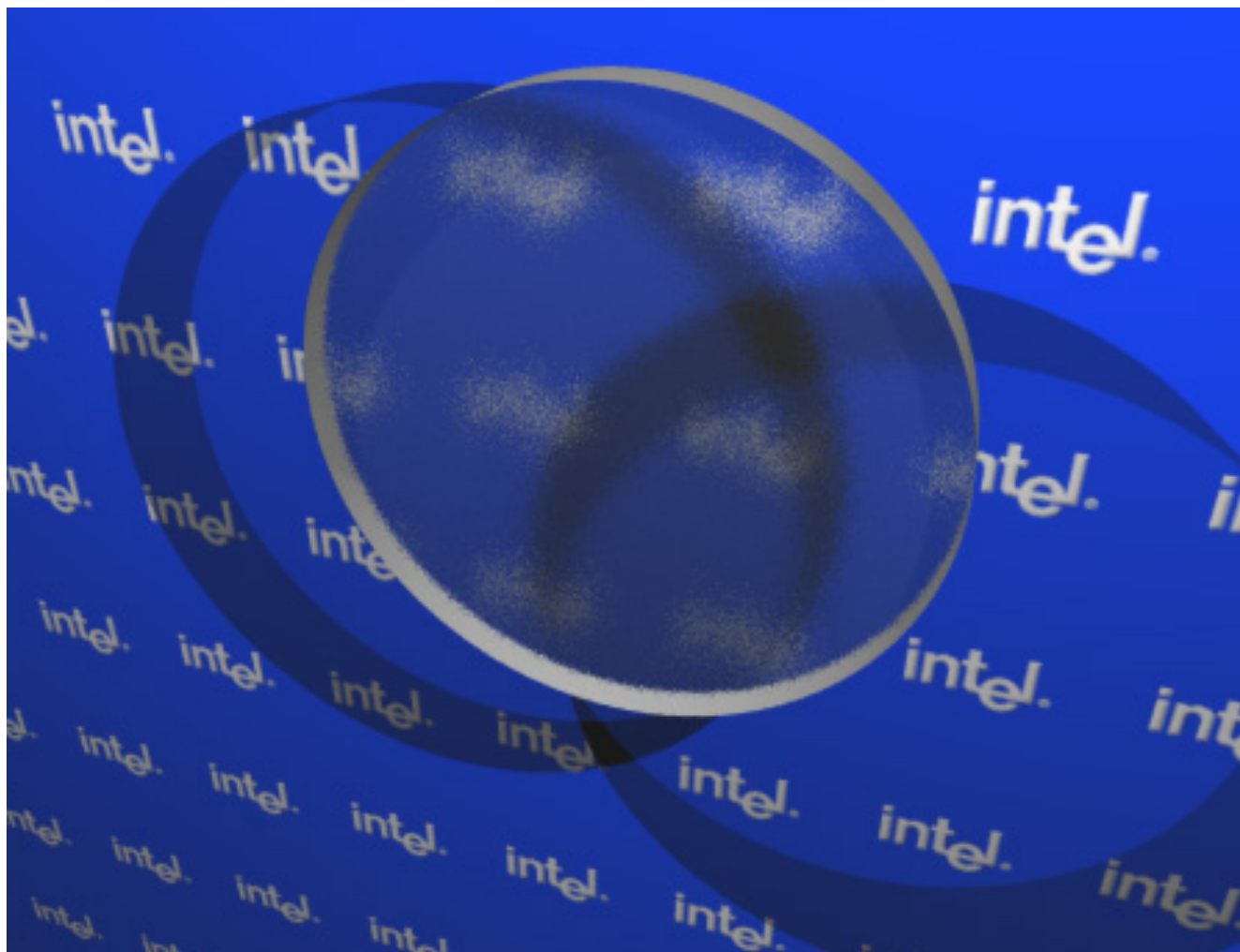
Jittering 3x3

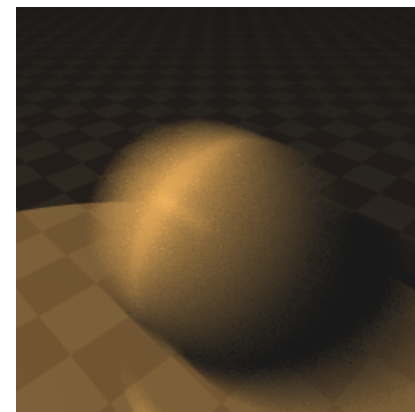
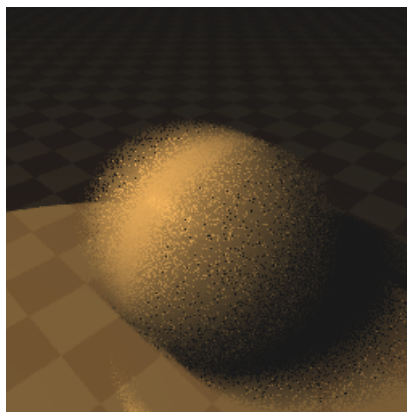
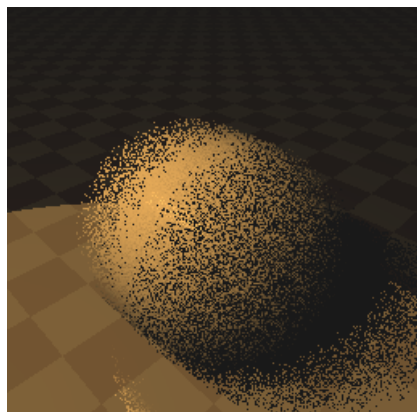
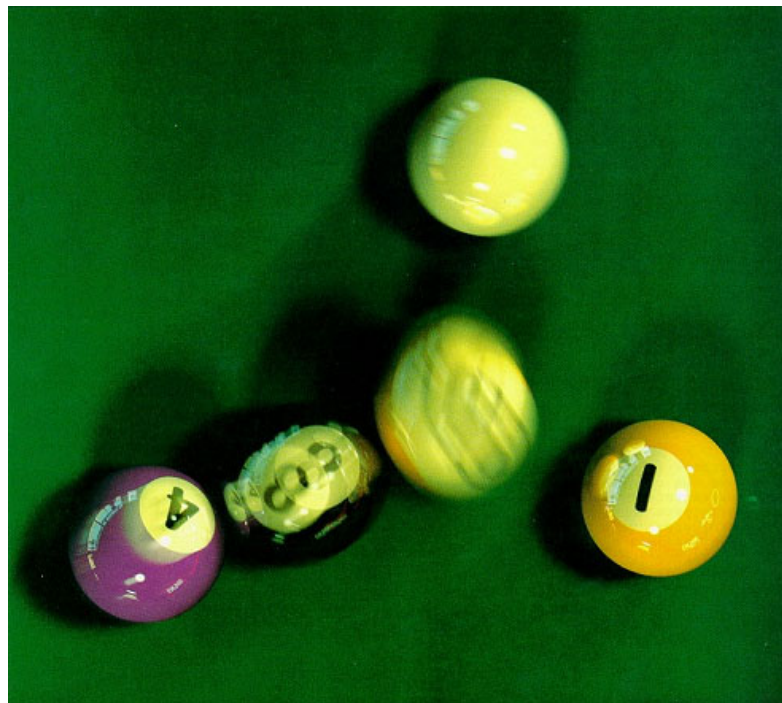


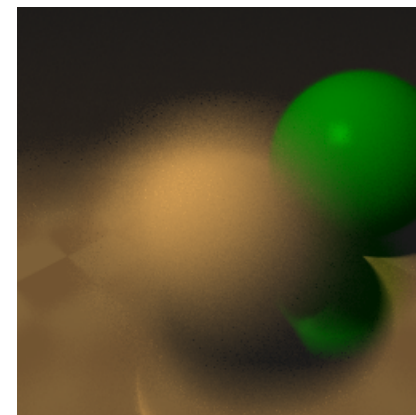
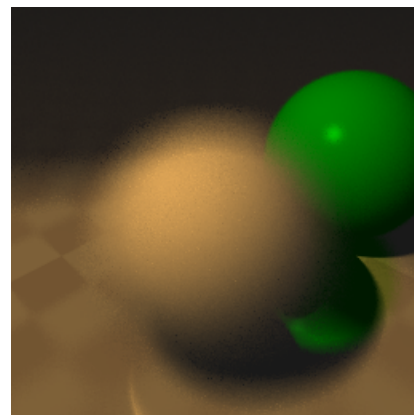
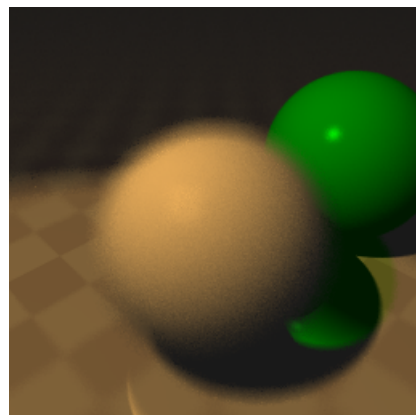
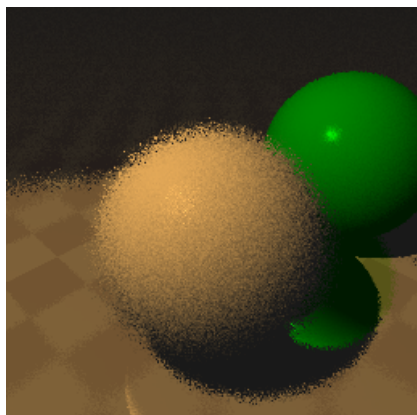
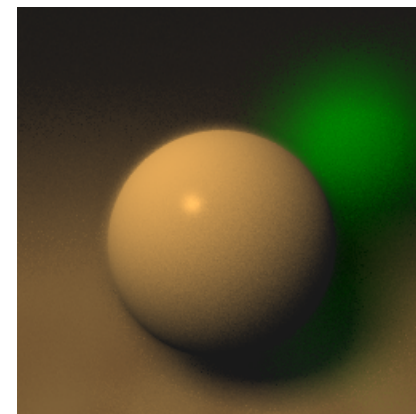
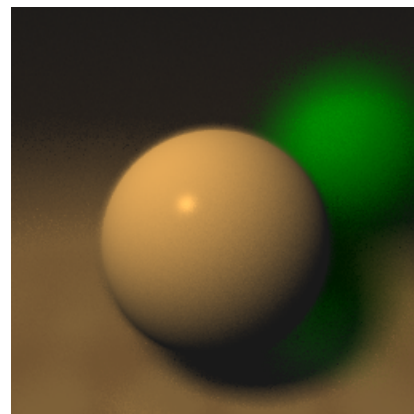
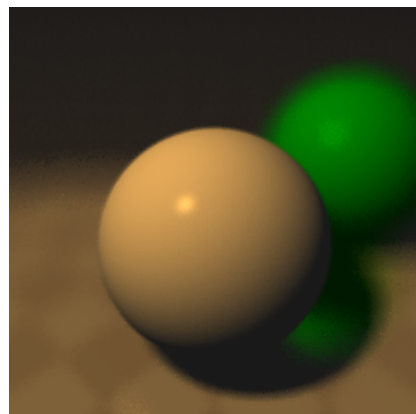
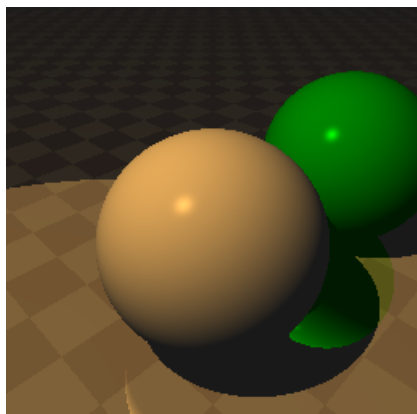
Jittering 5x5



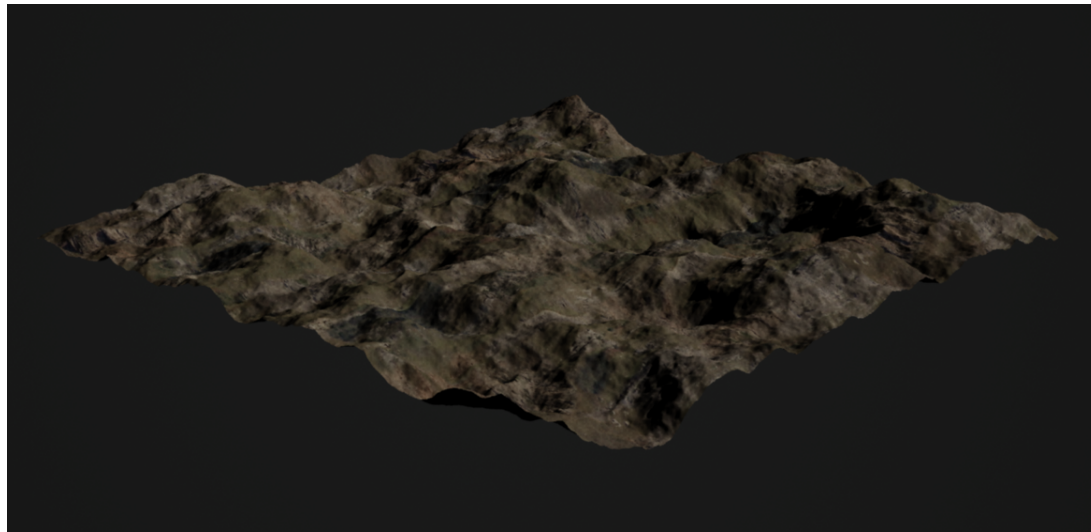








- Граничные оболочки (bound volumes)
- Иерархии оболочек
- Разбиение на воксели, grid tracing



- **Практические задания** (до зачетного занятия)
 - Реализовать сферический источник света и получить сцену с «мягкими» тенями (применить к предыдущим заданиям на RT).