Ray Tracing
shallow depth of field, area light sources, diffuse interreflection
Distribution Ray Tracing
Anti-aliasing
Soft Shadows

[Diagram of an area light casting shadows on a ground plane, with points p and r indicated.]
Soft Focus

[Shirley and Marschner]
Fuzzy Reflections

\[ r, r', n, \theta, \theta, d \]
Motion Blur
Acceleration Structures
Acceleration Structures
Bounding boxes

- Bounding box
- Ray
- Diagram showing intersections:
  - $t \in [t_{x\text{min}}, t_{x\text{max}}]$
  - $t \in [t_{y\text{min}}, t_{y\text{max}}]$
  - $t \in [t_{x\text{min}}, t_{x\text{max}}] \cap [t_{y\text{min}}, t_{y\text{max}}]$
Uniform Spatial Partitioning

[Shirley and Marschner]
Bounding Volume Hierarchy

[Shirley and Marschner]