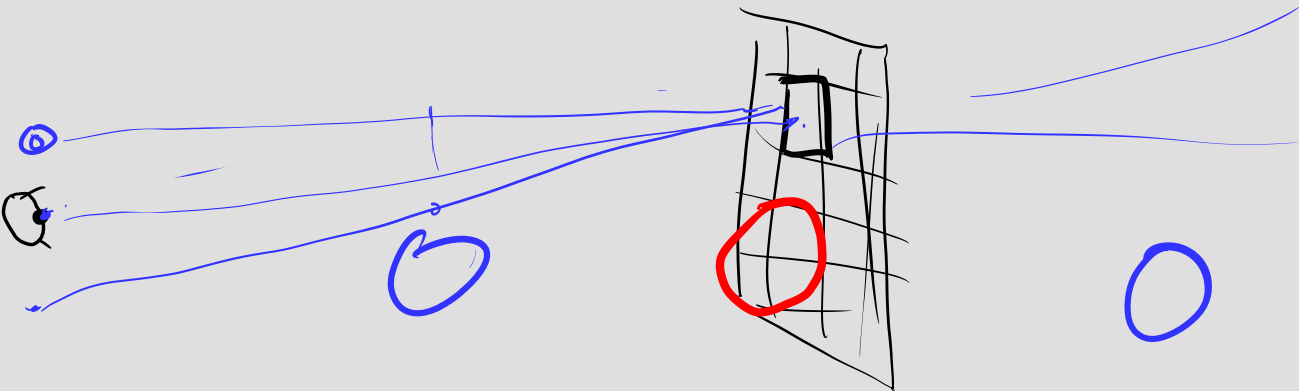
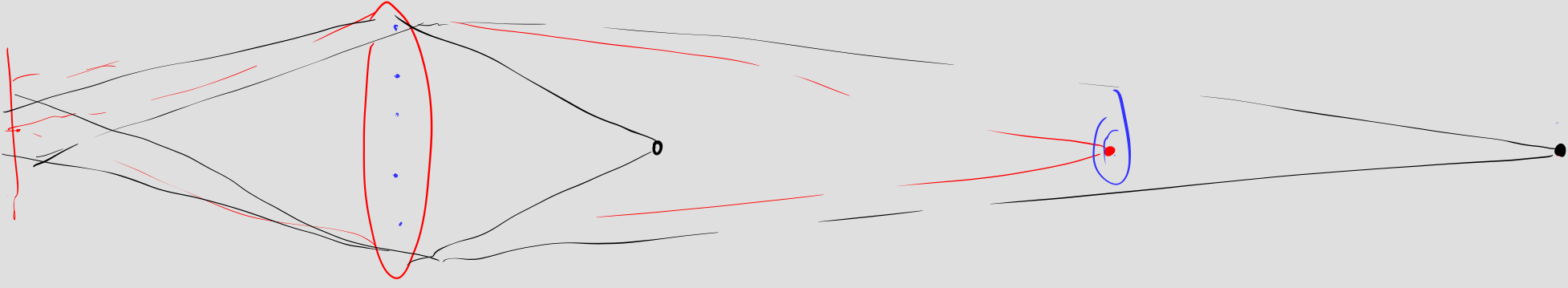
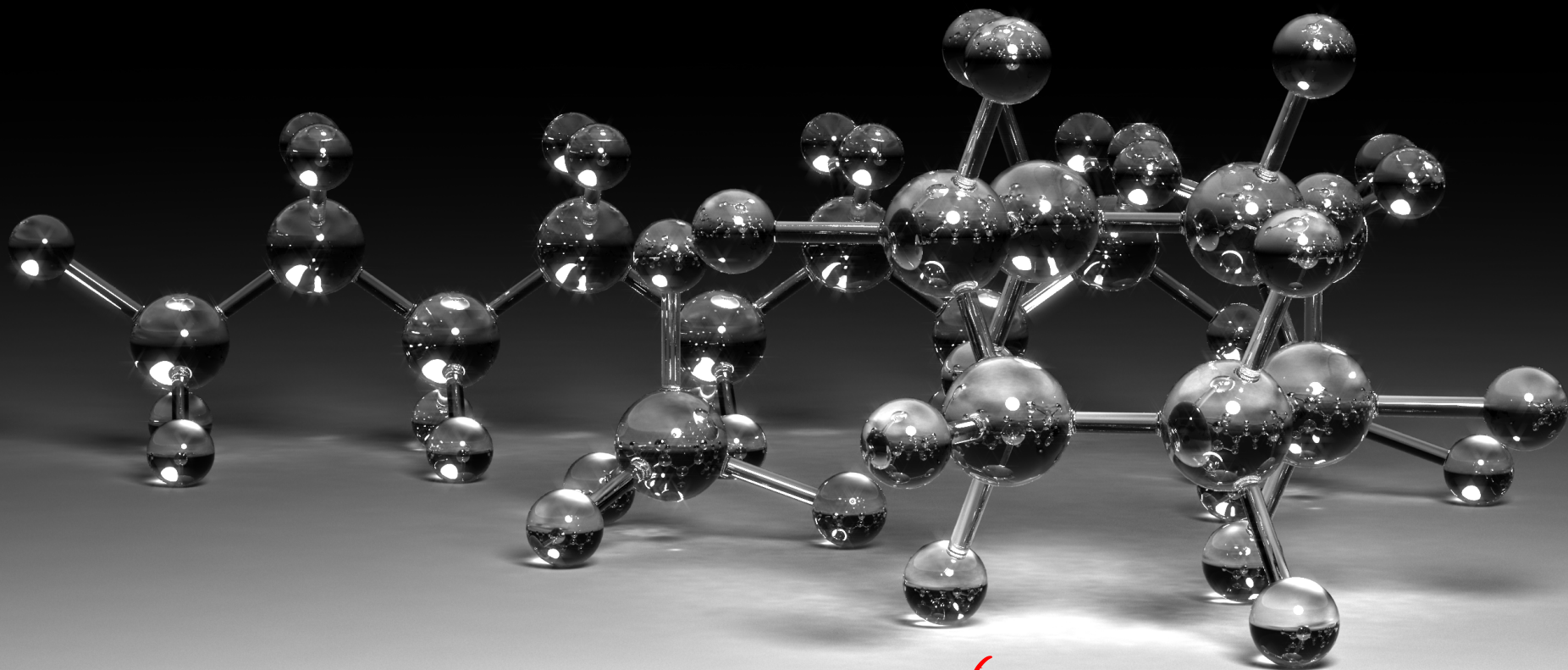


Color ~~light~~ ray
(1, 0.5, 0)

diff object
(1, 0, 0.5) → (1, 0, 0)

spec
(1, 1, 1)





Caustics

ray trace (Rayr)

for each obj_i

intersect (obj_i, r)

keep closest

hit norm
color

it
shinaj

← raytrace (reflect (R, normal))

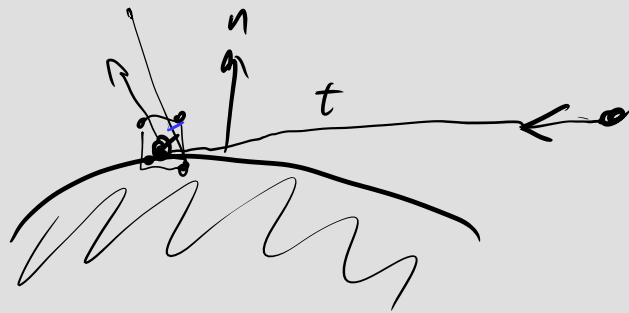
it
glass

← raytra (refract (r, normal))

⋮

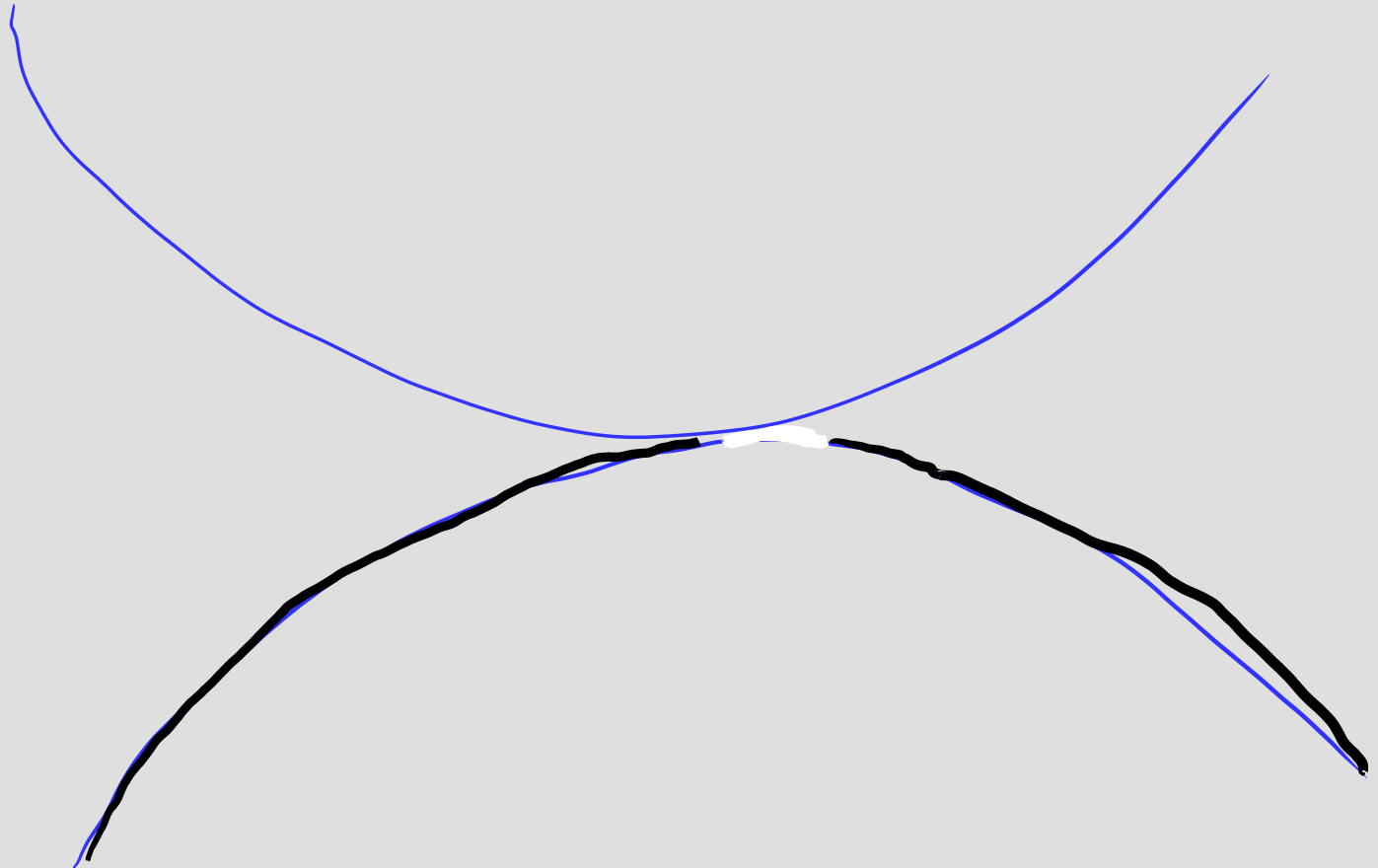
Shadow

if raytrace (shadow ray) does not intersect
lambert's k before light
else
black

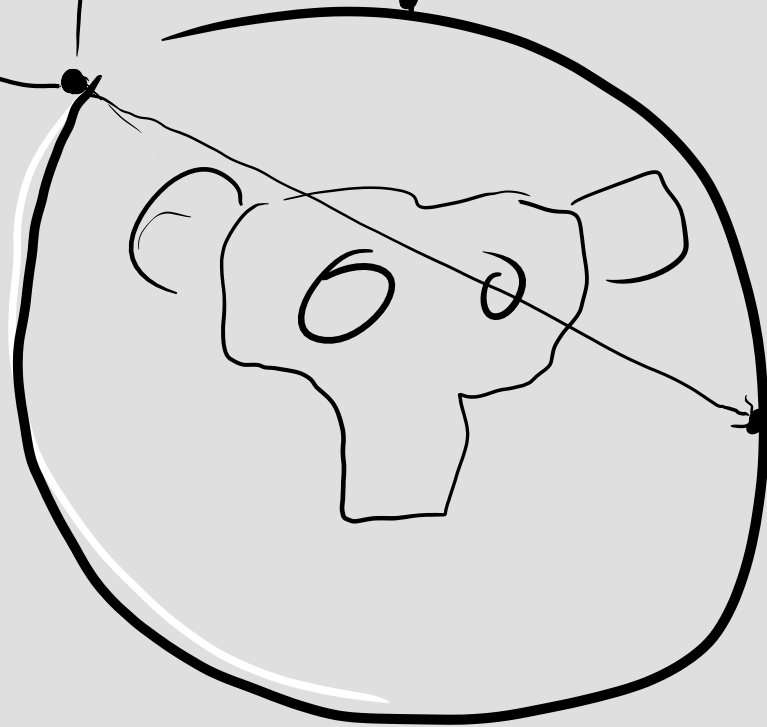
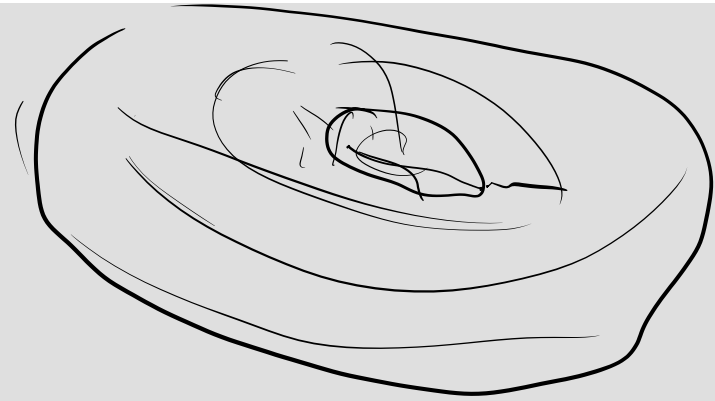


Self-intersection

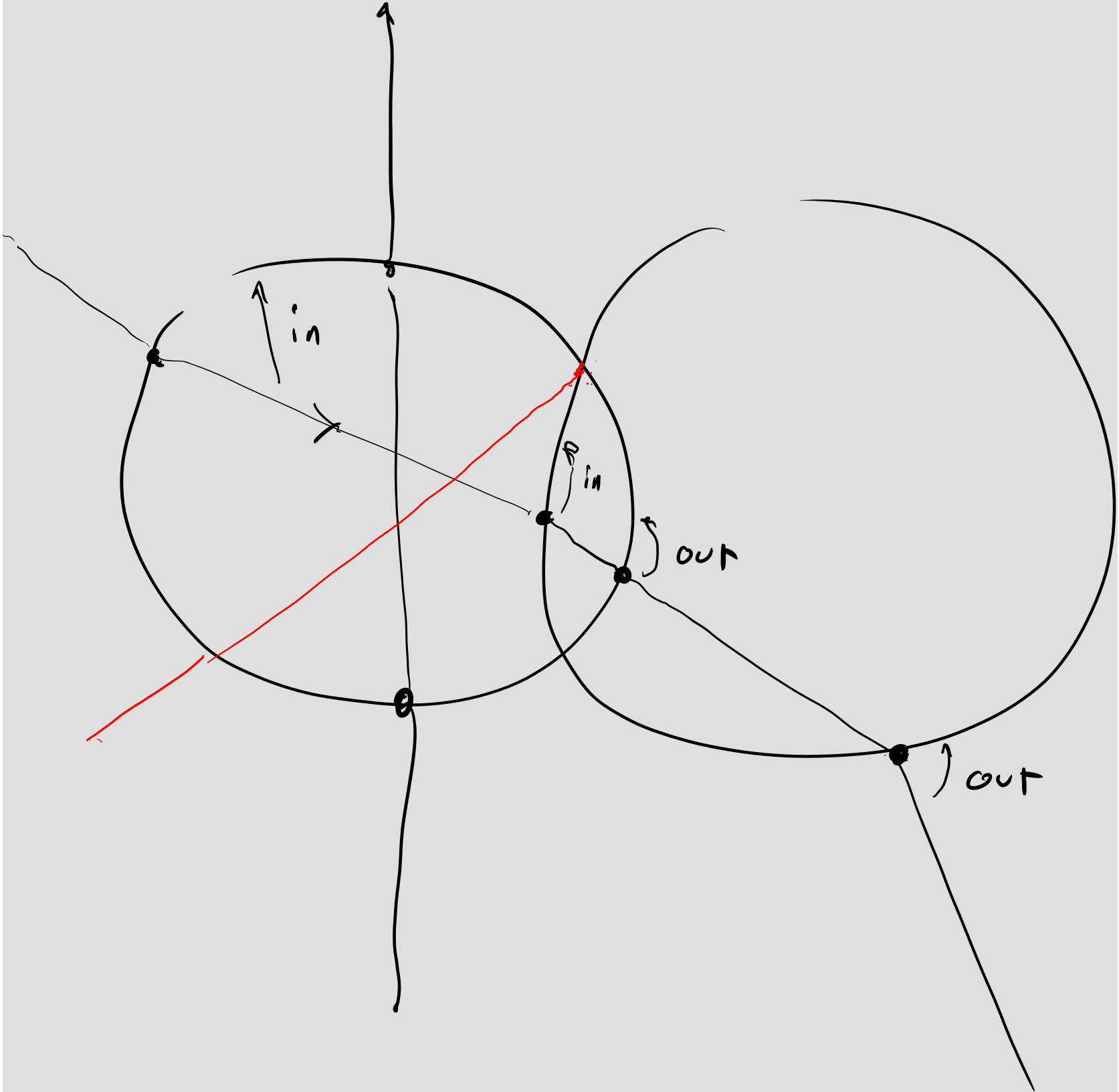
- Check if you rounded away
- refuse to hit self (obs ray)
- offset ray / start at side
- Try several points
- don't hit inside



ray: can be
may hit inside



← l
h: outside



Spatial Bundling Hierarchy

